

FIGURE 1A

102
 SEQ ID:
 103
 Bac 19
 PF 19
 Bac 19
 PF 19
 Bac 19
 PF 19
 Bac 19
 PF 19
 Bac 19
 PF 19
 Bac 19
 PF 19
 Bac 19
 PF 19

	E	F	N	I	S	Q	H	Q	C	V	K	K	Q	C	P	E	N
Bac 19	GAA	TTC	AAC	ATC	TCG	CAG	CAC	CAA	TCC	GTG	AAA	AAA	CAA	TGT	CCC	GAG	AAC
PF 19																	
	AAC	ATT	TCA	CAA	CAC	CAA	TGC	GTA	AAA	AAA	CAA	TGT	CCA	GAA	AAT		
Bac 19	S	G	C	F	R	H	L	D	E	R	E	E	C	K	C	L	L
PF 19	TCT	GOC	TGT	TTC	AGA	CAC	TTG	GAC	GAG	AGA	GAG	GAG	TGT	AAA	TGT	CTG	CTG
	TCT	GGA	TGT	TTC	AGA	CAT	TTA	GAT	GAA	AGA	GAA	GAA	TGT	AAA	TGT	TTA	TTA
Bac 19	N	Y	K	Q	E	G	D	K	C	V	E	N	P	N	P	T	C
PF 19	AAC	TAC	AAA	CAG	GAG	GGC	TAC	AAG	TGC	GTG	GAG	AAC	CCC	AAC	CCG	ACC	TGT
	AAT	TAC	AAA	CAA	GAA	GGT	GAT	AAA	TGT	GTT	GAA	AAT	CCA	AAT	CCT	ACT	TGT
Bac 19	N	E	N	N	G	G	C	D	A	D	A	K	C	T	E	E	D
PF 19	AAC	GAG	AAC	AAC	GGC	GGC	TGT	GAC	GCA	GAC	GCC	AAA	TGC	ACC	GAG	GAG	GAC
	AAC	GAA	AAT	AAT	GGT	CGA	TGT	GAT	GCA	GAT	GCC	AAA	TGT	ACC	GAA	GAA	GAT
Bac 19	S	G	S	N	G	K	K	I	T	C	E	C	T	K	P	D	S
PF 19	TCG	GGC	AGC	AAC	GGC	AAG	AAA	ATC	ACG	TGT	GAG	TGT	ACC	AAA	CCC	GAC	TGC
	TCA	GGT	AGC	AAC	GGA	AAG	AAA	ATC	ACA	TGT	GAA	TGT	ACT	AAA	CCT	GAT	TCT
Bac 19	Y	P	L	F	D	G	I	F	C	S	.	.					
PF 19	TAC	CCG	CTG	TTC	GAC	GGC	ATC	TTC	TGC	AGC	TAA	TAA					
	TAT	CCA	CTT	TTC	GAT	GGT	ATT	TTC	TGC	AGT							

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FIGURE 1B

Site Eco RI

	E	F	N	I	S	Q	H	Q	C	V	K	K	Q	C	P	E	N
Bac 19	GAA TTT	AAC	ATC	TCG	CAG	CAC	CAA	TGC	GTG	AAA	AAA	CAA	TGT	CCC	GAG	AAC	
PF 19																	
	AAC	ATT	TCA	CAA	CAC	CAA	TGC	GTA	AAA	AAA	CAA	TGT	CCA	GAA	AAT		
Bac 19	S	G	C	F	R	H	L	D	E	R	E	E	C	K	C	L	L
PF 19	TCT	GGC	TGT	TTC	AGA	CAC	TTG	GAC	GAG	AGA	GAG	GAG	TGT	AAA	TGT	CTG	CTG
PF 19	TCT	GGA	TGT	TTC	AGA	CAT	TTA	GAT	GAA	AGA	GAA	GAA	TGT	AAA	TGT	TTA	TTA
Bac 19	N	Y	K	Q	E	G	D	K	C	V	E	N	P	N	P	T	C
PF 19	AAC	TAC	AAA	CAG	GAG	GGC	GAC	AAG	TGC	GTG	GAG	AAC	CCC	AAC	CCG	ACC	TGT
PF 19	AAT	TAC	AAA	CAA	GAA	GGT	GAT	AAA	TGT	GTT	GAA	AAT	GCA	AAT	CCT	ACT	TGT
Bac 19	N	E	N	N	G	G	C	D	A	D	A	K	C	T	E	E	D
PF 19	AAC	GAG	AAC	AAC	GGC	GGC	TGT	GAC	GCA	GAC	GCC	AAA	TGC	ACC	GAG	GAG	GAC
PF 19	AAC	GAA	AAT	AAT	GGT	GGA	TGT	GAT	GCA	GAT	GCC	AAA	TGT	ACC	GAA	GAA	GAT
Bac 19	S	G	S	N	G	K	K	I	T	C	E	C	T	K	P	D	S
PF 19	TCC	GGC	AGC	AAC	GGC	AAG	AAA	ATC	ACG	TGT	GAG	TGT	ACC	AAA	CCC	GAC	TCC
PF 19	TCA	GGT	AGC	AAC	GGA	AAG	AAA	ATC	ACA	TGT	GAA	TGT	ACT	AAA	CCT	GAT	TCT
Bac 19	Y	P	L	F	D	G	I	F	C	S	S	S	N	F	L	G	I
PF 19	TAC	CCG	CTG	TTC	GAC	GGC	ATC	TTC	TGC	AGC	TCC	TCT	AAC	TTC	TTG	GGC	ATC
PF 19	TAT	CCA	CTT	TTC	GAT	GGT	ATT	TTC	TGC	AGT	TCC	TCT	AAC	TTC	TTA	GGA	ATA
Bac 19	S	F	L	L	I	L	M	L	I	L	Y	S	F	I	.	.	.
PF 19	TGG	TTC	TTG	TTG	ATC	CTC	ATG	TTG	ATC	TTG	TAC	AGC	TTC	ATT	TAA	TAA	TAA
PF 19	TCA	TTC	TTA	TTA	ATA	CTC	ATG	TTA	ATA	TTA	TAC	AGT	TTC	ATT			

B64T80-EEETET60

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ID7
 ID8

ATG	AAG	GCG	CTA	CTC	TTT	TTG	TTC	TCT	TTC	ATT	TTT	TTC	GTG	ACC	AAA	TGT
M	K	A	L	L	F	L	F	S	F	I	F	F	V	T	K	C
CAA	TGT	GAA	ACA	GAA	AGT	TAT	AAG	CAG	CTT	GTA	GCG	AAC	GTG	GAC	GAA	TTC
Q	C	E	T	E	S	Y	K	Q	L	V	A	N	V	D	E	F
AAC	ATC	TCG	CAG	CAC	CAA	TGC	GTG	AAA	AAA	CAA	TGT	CCC	GAG	AAC	TCT	GGC
N	I	S	Q	H	Q	C	V	K	K	Q	C	P	E	N	S	G
TGT	TTC	AGA	CAC	TTG	GAC	GAG	AGA	GAG	GAG	TGT	AAA	TGT	CTG	CTG	AAC	TAC
C	F	R	H	L	D	E	R	E	E	C	K	C	L	L	N	Y
AAA	CAG	GAG	GGC	GAC	AAG	TGC	GTG	GAG	AAC	CCC	AAC	CCG	ACC	TGT	AAC	GAG
K	Q	E	G	D	K	C	V	E	N	P	N	P	T	C	N	E
AAC	AAC	GGC	GGC	TGT	GAC	GCA	GAC	GCC	AAA	TGC	ACC	GAG	GAG	GAC	TCG	GGC
N	N	G	G	C	D	A	D	A	K	C	T	E	E	D	S	G
AGC	AAC	GGC	AAG	AAA	ATC	ACG	TGT	GAG	TGT	ACC	AAA	CCC	GAC	TCG	TAC	CCG
S	N	G	K	K	I	T	C	E	C	T	K	P	D	S	Y	P
CTG	TTC	GAC	GGC	ATC	TTC	TGC	AGC	TAA	TAA							
L	F	D	G	I	F	C	S	*	*							

FIGURE 1C

864T80"EE4E4E60

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109
1010

GAA	ACA	GAA	AGT	TAT	AAG	CAG	CTT	GTA	GCC	AAC	GTG	GAC	GAA	TTC
E	T	E	S	Y	K	Q	L	V	A	N	V	D	<u>E</u>	<u>F</u>
AAC	ATC	TCG	CAG	CAC	CAA	TGC	GTG	AAA	AAA	CAA	TGT	CCC	GAG	AAC
N	I	S	Q	H	Q	C	V	K	K	Q	C	P	E	N
TGT	TTC	AGA	CAC	TTG	GAC	GAG	AGA	GAG	GAG	TGT	AAA	TGT	CTG	CTG
C	F	R	H	L	D	E	R	E	E	C	K	C	L	L
AAA	CAG	GAG	GGC	GAC	AAG	TGC	GTG	GAG	AAC	CCC	AAC	CCG	ACC	TGT
K	Q	E	G	D	K	C	V	E	N	P	N	P	T	C
AAC	AAC	GGC	GGC	TGT	GAC	GCA	GAC	GCC	AAA	TGC	ACC	GAG	GAG	GAC
N	N	G	G	C	D	A	D	A	K	C	T	E	E	D
AGC	AAC	GGC	AAG	AAA	ATC	ACG	TGT	GAG	TGT	ACC	AAA	CCC	GAC	TCG
S	N	G	K	K	I	T	C	E	C	T	K	P	D	S
CTG	TTC	GAC	GGC	ATC	TTC	TGC	AGC	TAA	TAA					
L	F	D	G	I	F	C	S	*	*					

FIGURE 1D

09134333-084980-EEET60

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FIGURE 2

091433 081498

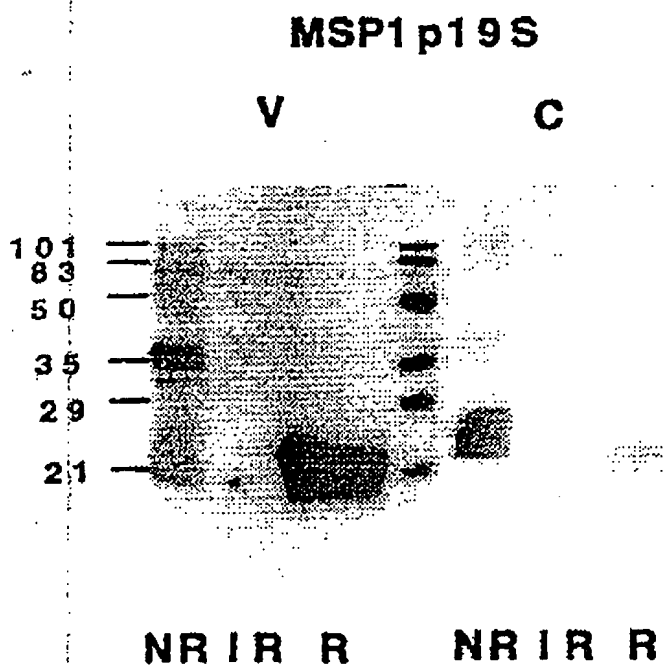


FIGURE 2B

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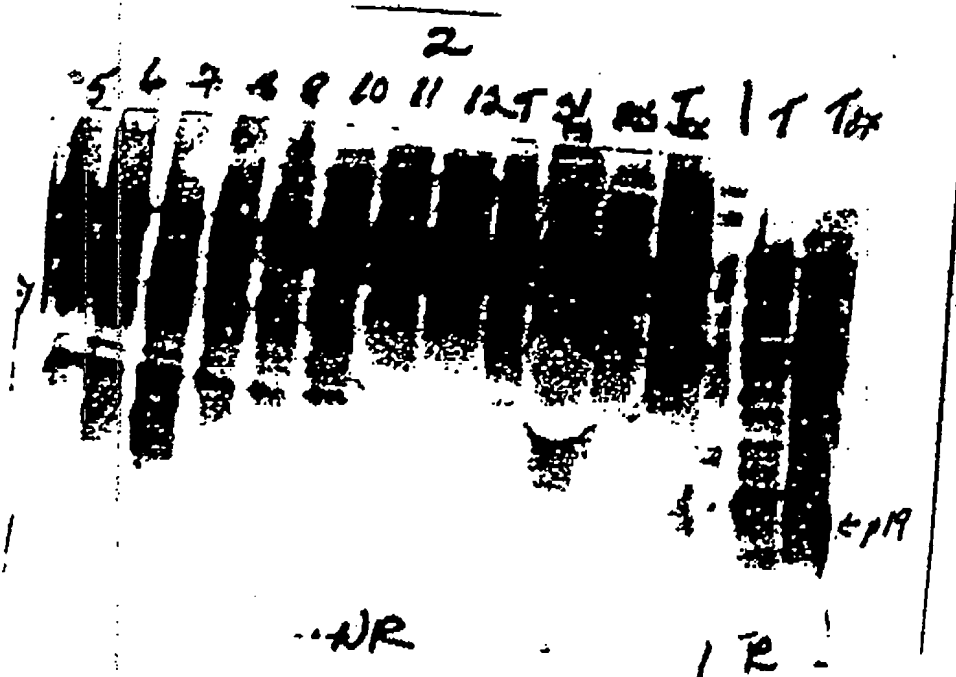


FIGURE 3

09134333, 084498

ELISA INHIBITION BY P. VIVAX MSP-1 P42 AND P19 ANTIGENS

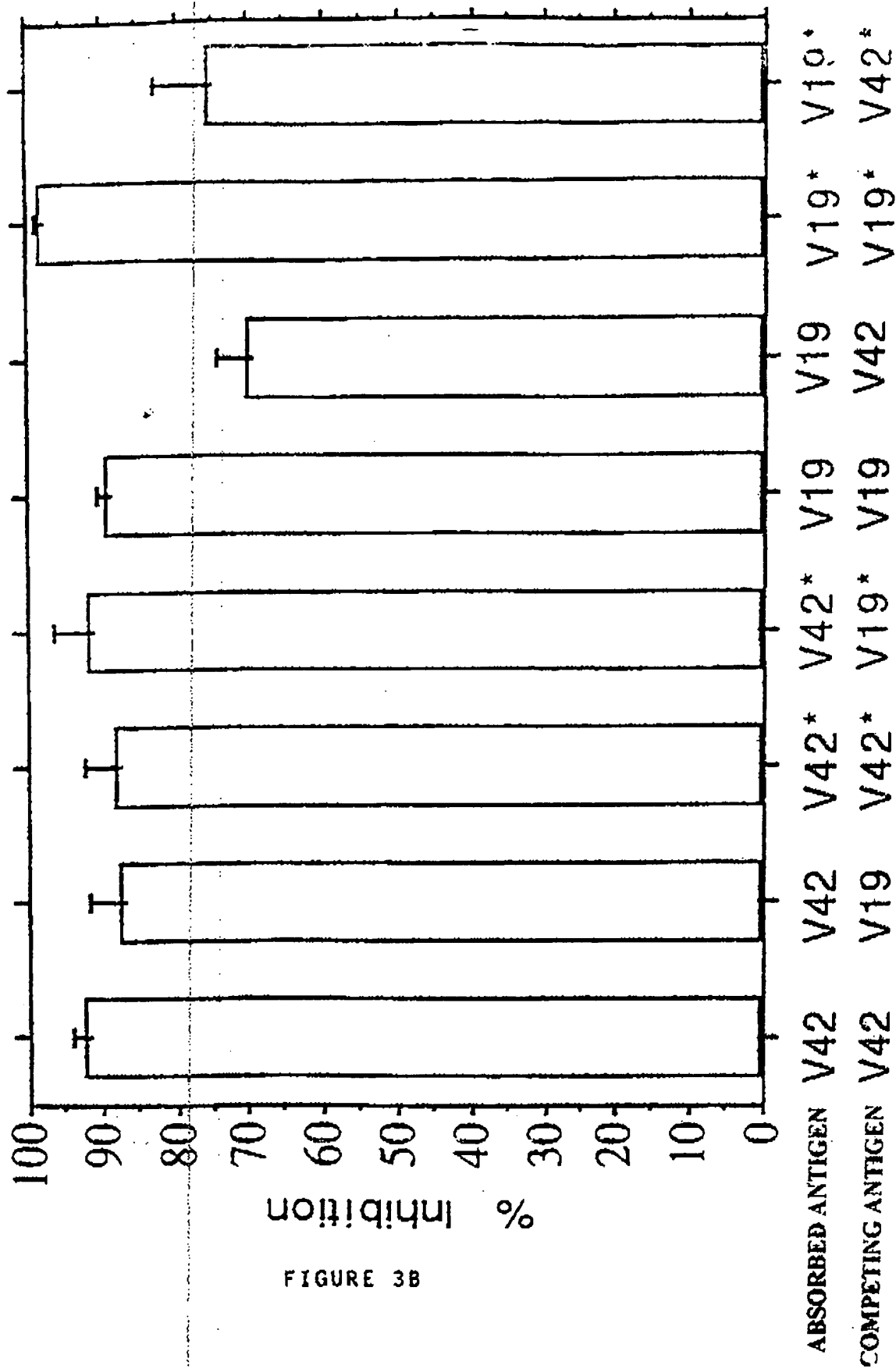


FIGURE 3B

A

Cynomolgi
Vivax (Belam)
Vivax (Sal-I)
Consensus

QOVITGEAES EAP EILVPOG INEYDVVYIK PLAGWYKTIK KPLENHVHAL NTNITOMLDS RLKKRNYFLD VLNSOLNPYS IPHSGEYIK
QOVITGEAES EAP EILVPOG ISOYDVVYIK PLAGWYKTIK KOLENHVHAF NITITOMLDS RLKKRNYFLE VLNSOLNPFK YSPSGEYIK
QOVITGEAES EAP EILVPOG ISOYDVVYIK PLAGWYKTIK KOLENHVHAF NITITOMLDS RLKKRNYFLE VLNSOLNPFK YSSSGEYIK
QOVITGEAES EAP EILVPOG ISOYDVVYIK PLAGWYKTIK KOLENHVHAF NITITOMLDS RLKKRNYFLE VLNSOLNPFK YSSSGEYIK

91 42

Cynomolgi
Vivax (Belam)
Vivax (Sal-I)
Consensus

DYKLLDLE KKKLGGSYKY IGASVOMV TANDGLAYYO KMGOLYKKNH DEYVACQKEV ENINCHCEI KKKTCSEAEI ANDKTCSEAEI
DYLKLOLEK KKKLGGSYKY IGASVOMV TANDGLAYYO KMGOLYKKNH TAVDEEVKKV EIKAEEDDK KKKTCSEAEI ITEKTCSEAEI
DYLKLOLEK KKKLGGSYKY IGASVOMV TANDGLAYYO KMGOLYKKNH TAVDEEVKKV EIKAEEDDK KKKTCSEAEI ITEKTCSEAEI
DYLKLOLEK KKKLGGSYKY IGASVOMV TANDGLAYYO KMGOLYKKNH TAVDEEVKKV EIKAEEDDK KKKTCSEAEI ITEKTCSEAEI

REGION I

REGION II

181

Cynomolgi
Vivax (Belam)
Vivax (Sal-I)
Consensus

K EELOKYLPF LSSIOKEYST LVNKVHSYID TLKKTINNCO IEKKEAETIV INKLEDSYKMD EELDVKSSOL KEDDVKSSOL LEKLMNSKL
KAELEKYLPP LNSLOKEYES LVSKVNTYTD NLKRVINNCO LEKKEAETIV INKLEDSYKMD EELDVKSSOL KEDDVKSSOL LEKLMNSKL
KAELEKYLPP LNSLOKEYES LVSKVNTYTD NLKRVINNCO LEKKEAETIV INKLEDSYKMD EELDVKSSOL KEDDVKSSOL LEKLMNSKL
KAELEKYLPP LNSLOKEYES LVSKVNTYTD NLKRVINNCO LEKKEAETIV INKLEDSYKMD EELDVKSSOL KEDDVKSSOL LEKLMNSKL

271

Cynomolgi
Vivax (Belam)
Vivax (Sal-I)
Consensus

NDEESKALS ELINVOIQML NDESEHRCIO INVPENAAACY RYLDGTEEWR CLLYFKEDAG KCVPAFRTIC KDNHGGCAPE AECKMNDKRE
NDEESKALS ELINVOIQML NDESEHRCIO INVPENAAACY RYLDGTEEWR CLLYFKEDAG KCVPAFRTIC KDNHGGCAPE AECKMNDKRE
NDEESKALS ELINVOIQML NDESEHRCIO INVPENAAACY RYLDGTEEWR CLLYFKEDAG KCVPAFRTIC KDNHGGCAPE AECKMNDKRE
NDEESKALS ELINVOIQML NDESEHRCIO INVPENAAACY RYLDGTEEWR CLLYFKEDAG KCVPAFRTIC KDNHGGCAPE AECKMNDKRE

REGION III

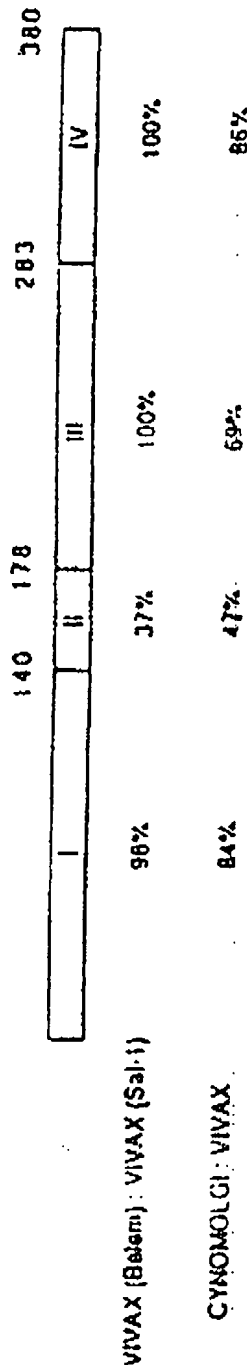
REGION IV

361

Cynomolgi
Vivax (Belam)
Vivax (Sal-I)
Consensus

IVCKCTKEGS EPLFEGVFC
IVCKCTKEGS EPLFEGVFC
IVCKCTKEGS EPLFEGVFC
IVCKCTKEGS EPLFEGVFC

FIGURE 4



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864780" EEEET60

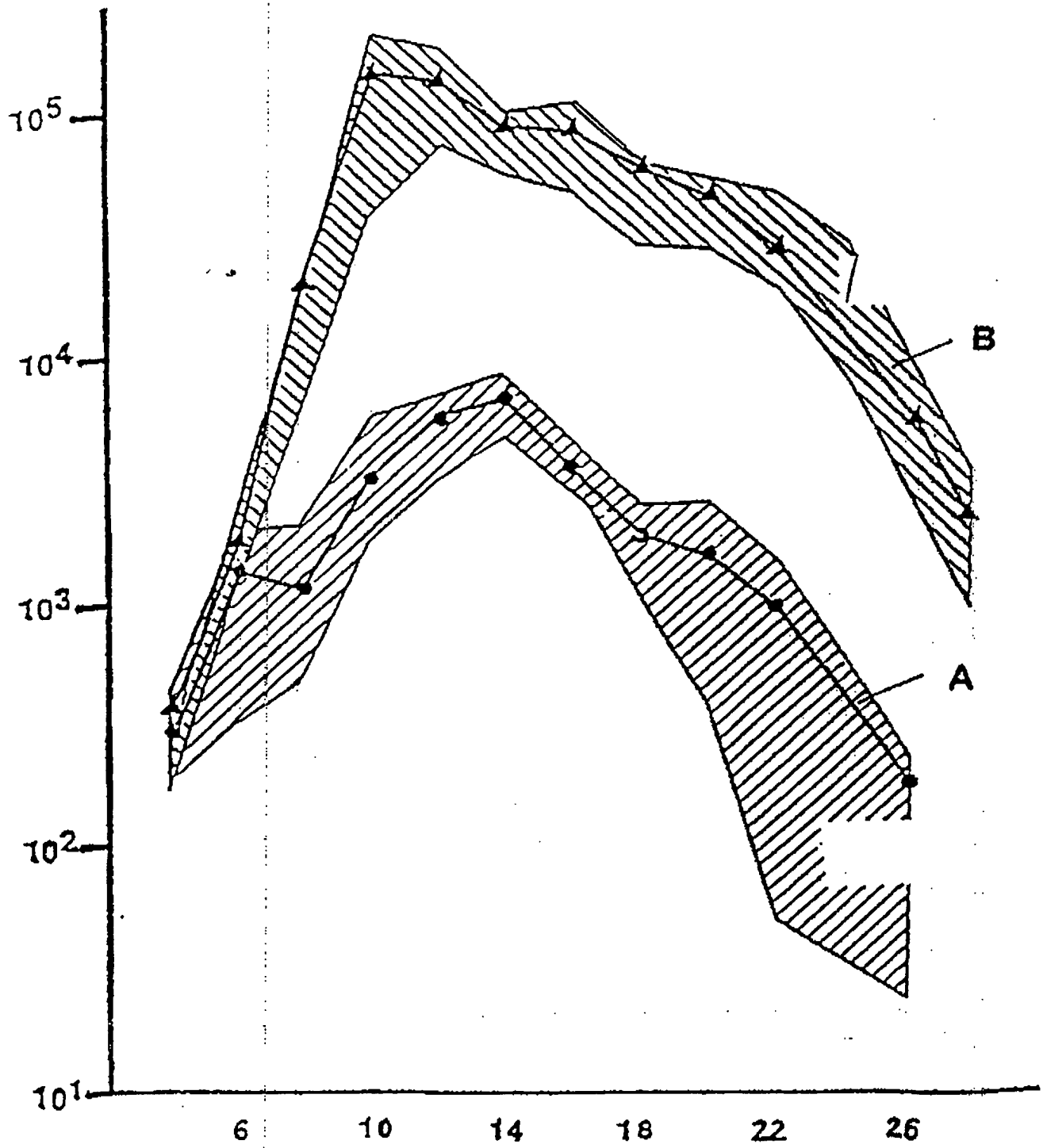


FIGURE 5

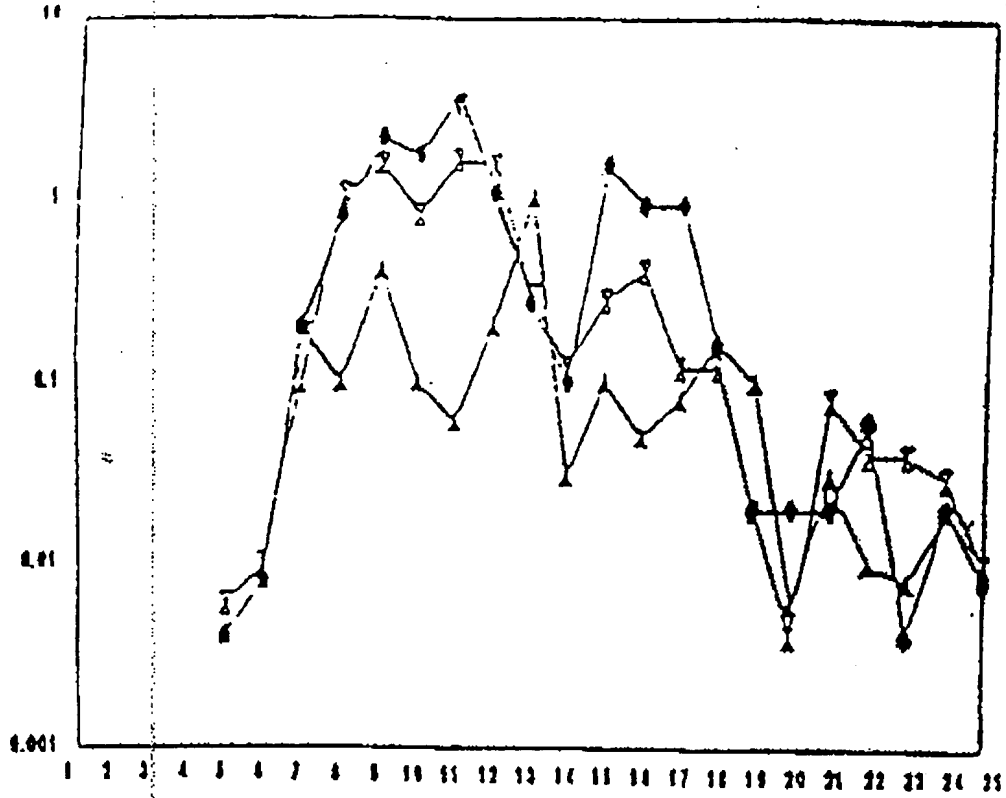


FIGURE 6A

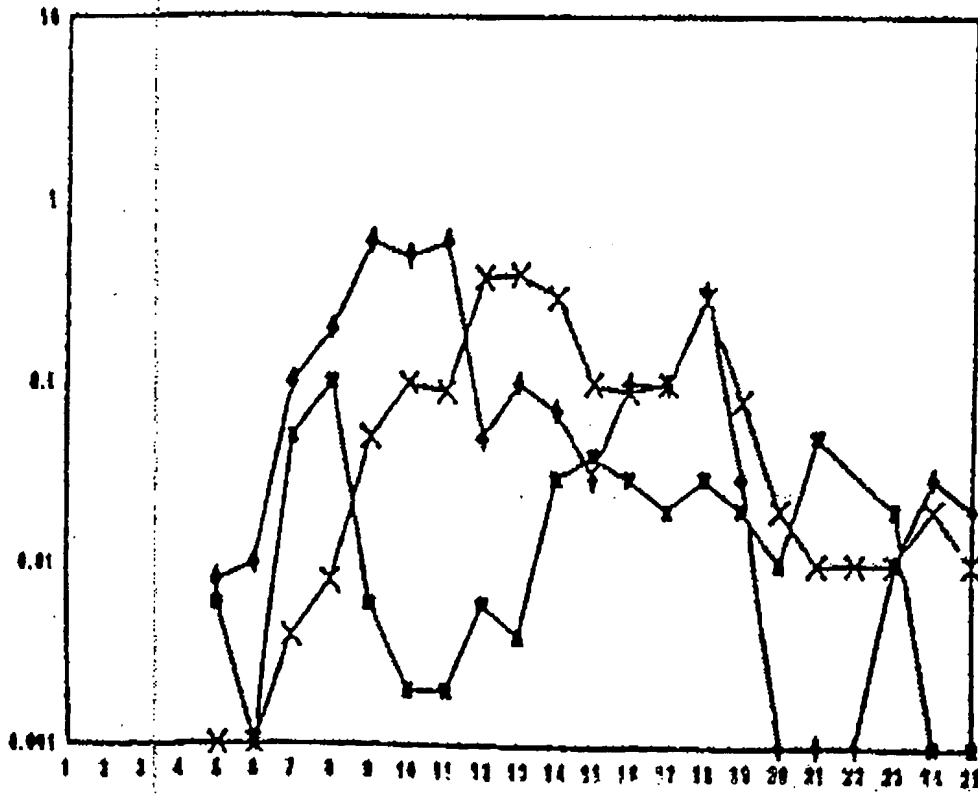


FIGURE 6B

1364780 "EEET60"

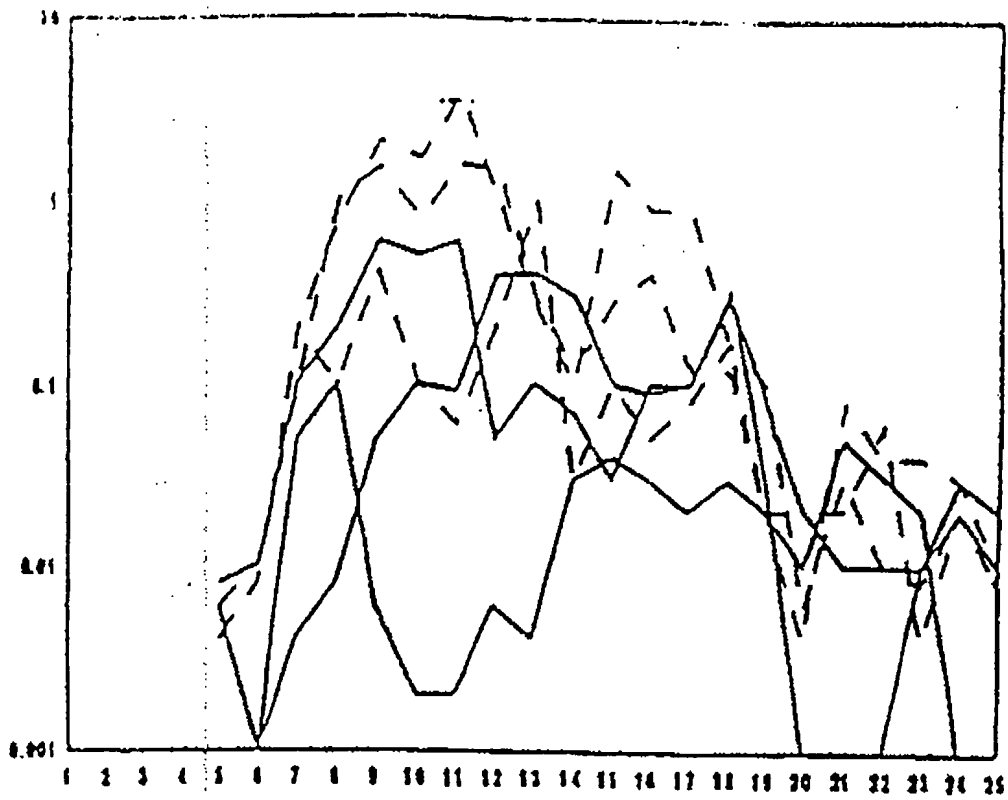


FIGURE 6C

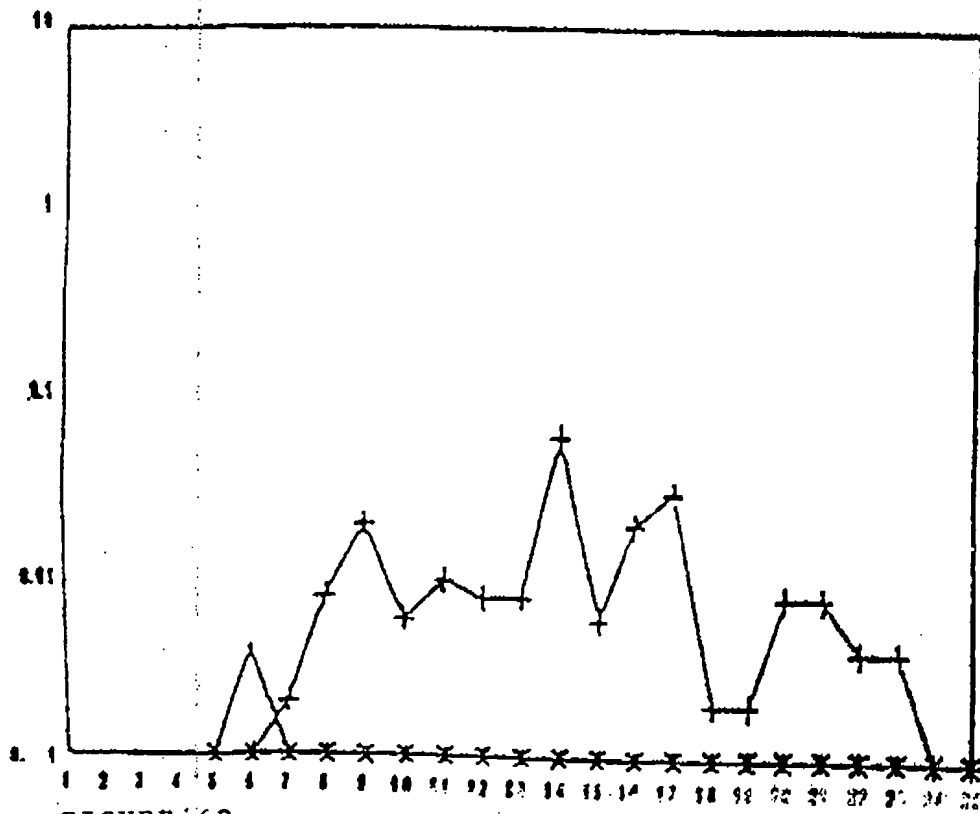


FIGURE 6D

091433-08490

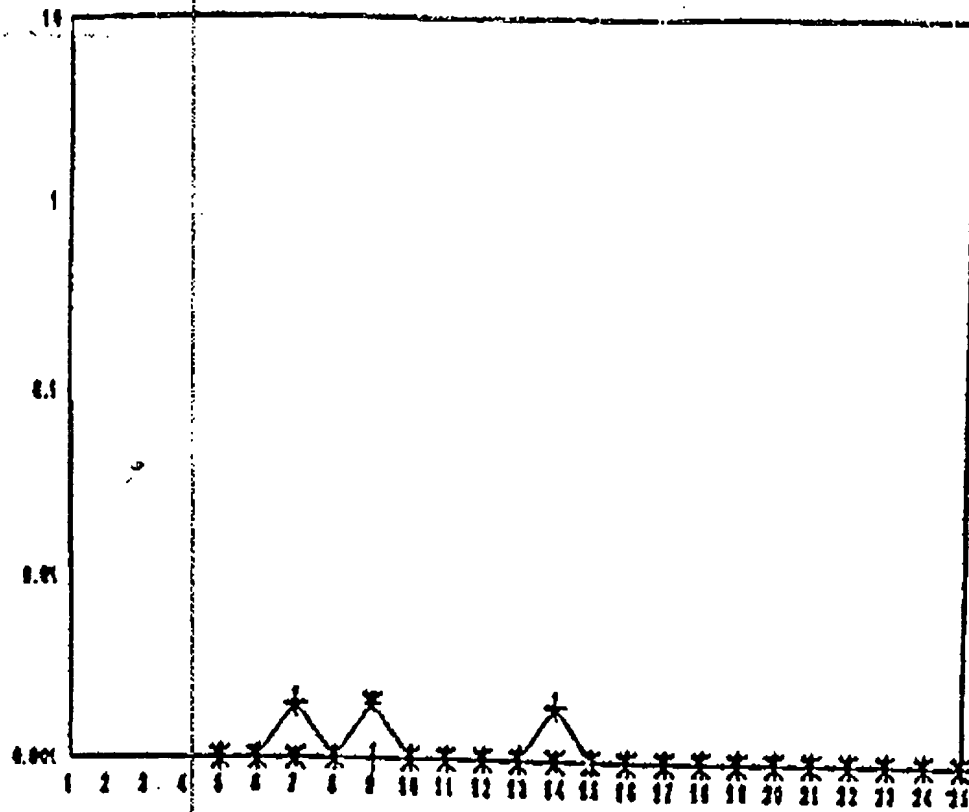


FIGURE 6E

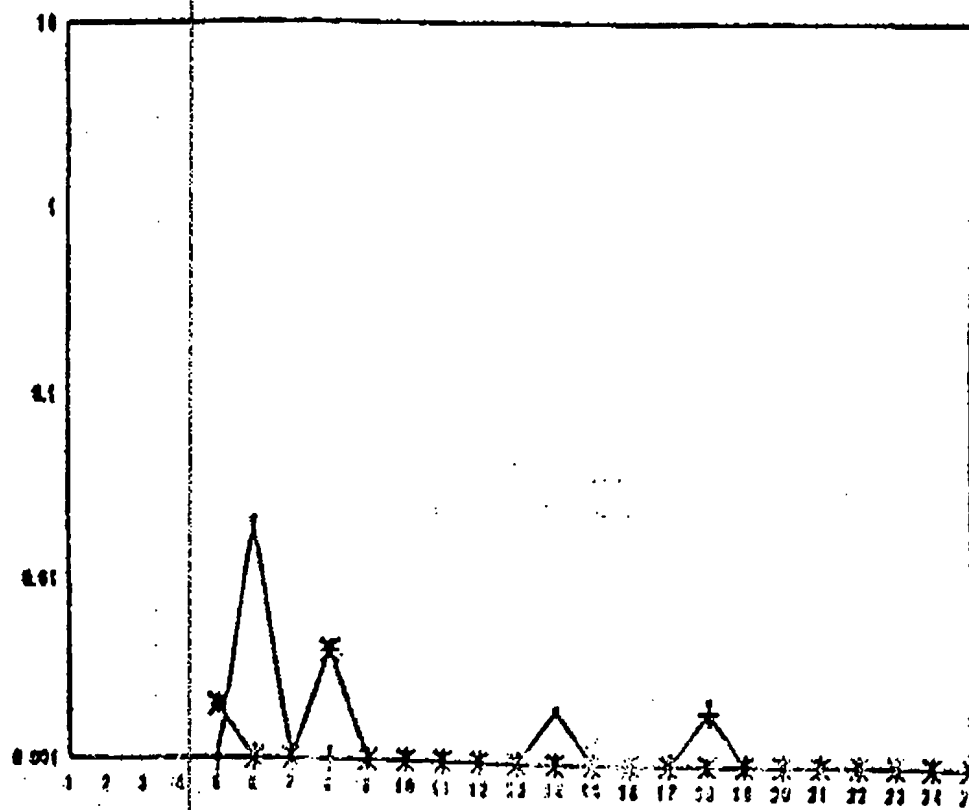


FIGURE 6F

FIGURE 6G

	Year	93	95	98	93	95	98	93	95	98	93	95	98	93	95	98	93	95	98	93	95	98							
Month		7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7							
Day		19	20	21	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Days post-infection		5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32

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→ = Absence of parasites in 400 microscopic fields

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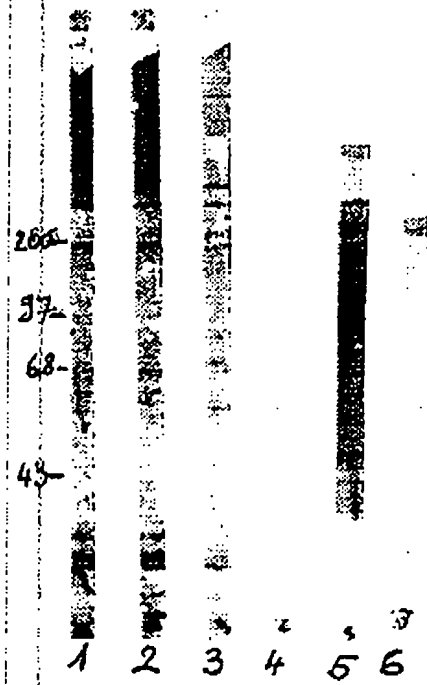


FIGURE 7

Demographic characteristics		Psychiatric history		Substance use		Social support		Treatment history	
Variable	Mean (SD)	Variable	Mean (SD)	Variable	Mean (SD)	Variable	Mean (SD)	Variable	Mean (SD)
Age	35.2 (12.5)	Previous psychiatric hospitalizations	1.8 (1.2)	Alcohol consumption	2.5 (1.5)	Family support	3.2 (1.8)	Previous treatment episodes	2.1 (1.3)
Gender	Male: 65%	Previous suicide attempts	1.5 (1.1)	Drug use	1.2 (0.8)	Community support	2.8 (1.5)	Medication adherence	1.9 (1.2)
Education	12.1 (2.3)	Current psychiatric diagnosis	Major depressive disorder: 78%	Smoking status	1.1 (0.7)	Employment status	2.5 (1.4)	Previous hospitalizations	1.7 (1.1)
Marital status	Married: 45%	Duration of illness	5.2 (3.1)	Exercise frequency	0.8 (0.5)	Financial stability	2.1 (1.3)	Previous relapses	1.6 (1.0)
Occupation	Unemployed: 35%	Family size	3.1 (1.4)	Stress management	1.5 (0.9)	Health insurance	2.9 (1.6)	Previous therapy sessions	2.3 (1.4)
Religion	Christian: 60%	Number of children	2.1 (1.2)	Self-esteem	1.8 (1.1)	Access to care	3.1 (1.7)	Previous hospitalizations	1.9 (1.2)
Comorbidities	Anxiety disorders: 40%	Number of siblings	2.5 (1.3)	Optimism	2.2 (1.2)	Transportation	2.7 (1.5)	Previous hospitalizations	2.0 (1.3)
Current symptoms	Depression: 85%	Number of friends	3.5 (1.6)	Resilience	2.5 (1.3)	Healthcare access	3.0 (1.6)	Previous hospitalizations	2.2 (1.4)
Functional status	Low: 60%	Number of pets	1.2 (0.8)	Life satisfaction	2.1 (1.1)	Healthcare quality	2.8 (1.5)	Previous hospitalizations	2.1 (1.3)
Quality of life	Low: 55%	Number of hobbies	1.5 (0.9)	Future outlook	2.3 (1.2)	Healthcare costs	2.9 (1.6)	Previous hospitalizations	2.0 (1.2)
Healthcare utilization	Low: 45%	Number of volunteer hours	1.8 (1.1)	Personal growth	2.4 (1.3)	Healthcare satisfaction	2.7 (1.4)	Previous hospitalizations	1.9 (1.1)
Healthcare costs	Low: 40%	Number of community activities	2.2 (1.2)	Personal achievement	2.6 (1.4)	Healthcare access	3.0 (1.6)	Previous hospitalizations	2.1 (1.3)
Healthcare access	Low: 35%	Number of social connections	2.8 (1.5)	Personal goals	2.7 (1.5)	Healthcare quality	2.8 (1.5)	Previous hospitalizations	2.2 (1.4)
Healthcare satisfaction	Low: 30%	Number of meaningful relationships	3.2 (1.6)	Personal fulfillment	2.8 (1.4)	Healthcare costs	2.9 (1.6)	Previous hospitalizations	2.3 (1.5)
Healthcare utilization	Low: 25%	Number of supportive relationships	3.5 (1.7)	Personal happiness	2.9 (1.5)	Healthcare access	3.1 (1.7)	Previous hospitalizations	2.4 (1.6)
Healthcare costs	Low: 20%	Number of trusted relationships	3.8 (1.8)	Personal well-being	3.0 (1.6)	Healthcare quality	3.0 (1.6)	Previous hospitalizations	2.5 (1.7)
Healthcare access	Low: 15%	Number of close relationships	4.0 (1.9)	Personal contentment	3.1 (1.7)	Healthcare satisfaction	3.1 (1.7)	Previous hospitalizations	2.6 (1.8)
Healthcare satisfaction	Low: 10%	Number of supportive relationships	4.2 (2.0)	Personal peace	3.2 (1.8)	Healthcare access	3.2 (1.7)	Previous hospitalizations	2.7 (1.9)
Healthcare utilization	Low: 5%	Number of meaningful relationships	4.5 (2.1)	Personal joy	3.3 (1.9)	Healthcare quality	3.3 (1.8)	Previous hospitalizations	2.8 (2.0)
Healthcare costs	Low: 0%	Number of social connections	4.8 (2.2)	Personal happiness	3.4 (2.0)	Healthcare costs	3.4 (1.9)	Previous hospitalizations	2.9 (2.1)
Healthcare access	Low: 0%	Number of trusted relationships	5.0 (2.3)	Personal well-being	3.5 (2.1)	Healthcare satisfaction	3.5 (2.0)	Previous hospitalizations	3.0 (2.2)
Healthcare satisfaction	Low: 0%	Number of supportive relationships	5.2 (2.4)	Personal contentment	3.6 (2.2)	Healthcare access	3.6 (2.1)	Previous hospitalizations	3.1 (2.3)
Healthcare utilization	Low: 0%	Number of meaningful relationships	5.5 (2.5)	Personal peace	3.7 (2.3)	Healthcare quality	3.7 (2.2)	Previous hospitalizations	3.2 (2.4)
Healthcare costs	Low: 0%	Number of social connections	5.8 (2.6)	Personal joy	3.8 (2.4)	Healthcare costs	3.8 (2.3)	Previous hospitalizations	3.3 (2.5)
Healthcare access	Low: 0%	Number of trusted relationships	6.0 (2.7)	Personal happiness	3.9 (2.5)	Healthcare satisfaction	3.9 (2.4)	Previous hospitalizations	3.4 (2.6)
Healthcare satisfaction	Low: 0%	Number of supportive relationships	6.2 (2.8)	Personal well-being	4.0 (2.6)	Healthcare access	4.0 (2.5)	Previous hospitalizations	3.5 (2.7)
Healthcare utilization	Low: 0%	Number of meaningful relationships	6.5 (2.9)	Personal contentment	4.1 (2.7)	Healthcare quality	4.1 (2.6)	Previous hospitalizations	3.6 (2.8)
Healthcare costs	Low: 0%	Number of social connections	6.8 (3.0)	Personal peace	4.2 (2.8)	Healthcare costs	4.2 (2.7)	Previous hospitalizations	3.7 (2.9)
Healthcare access	Low: 0%	Number of trusted relationships	7.0 (3.1)	Personal joy	4.3 (2.9)	Healthcare satisfaction	4.3 (2.8)	Previous hospitalizations	3.8 (3.0)
Healthcare satisfaction	Low: 0%	Number of supportive relationships	7.2 (3.2)	Personal happiness	4.4 (3.0)	Healthcare access	4.4 (2.9)	Previous hospitalizations	3.9 (3.1)
Healthcare utilization	Low: 0%	Number of meaningful relationships	7.5 (3.3)	Personal well-being	4.5 (3.1)	Healthcare quality	4.5 (3.0)	Previous hospitalizations	4.0 (3.2)
Healthcare costs	Low: 0%	Number of social connections	7.8 (3.4)	Personal contentment	4.6 (3.2)	Healthcare costs	4.6 (3.1)	Previous hospitalizations	4.1 (3.3)
Healthcare access	Low: 0%	Number of trusted relationships	8.0 (3.5)	Personal peace	4.7 (3.3)	Healthcare satisfaction	4.7 (3.2)	Previous hospitalizations	4.2 (3.4)
Healthcare satisfaction	Low: 0%	Number of supportive relationships	8.2 (3.6)	Personal joy	4.8 (3.4)	Healthcare access	4.8 (3.3)	Previous hospitalizations	4.3 (3.5)
Healthcare utilization	Low: 0%	Number of meaningful relationships							

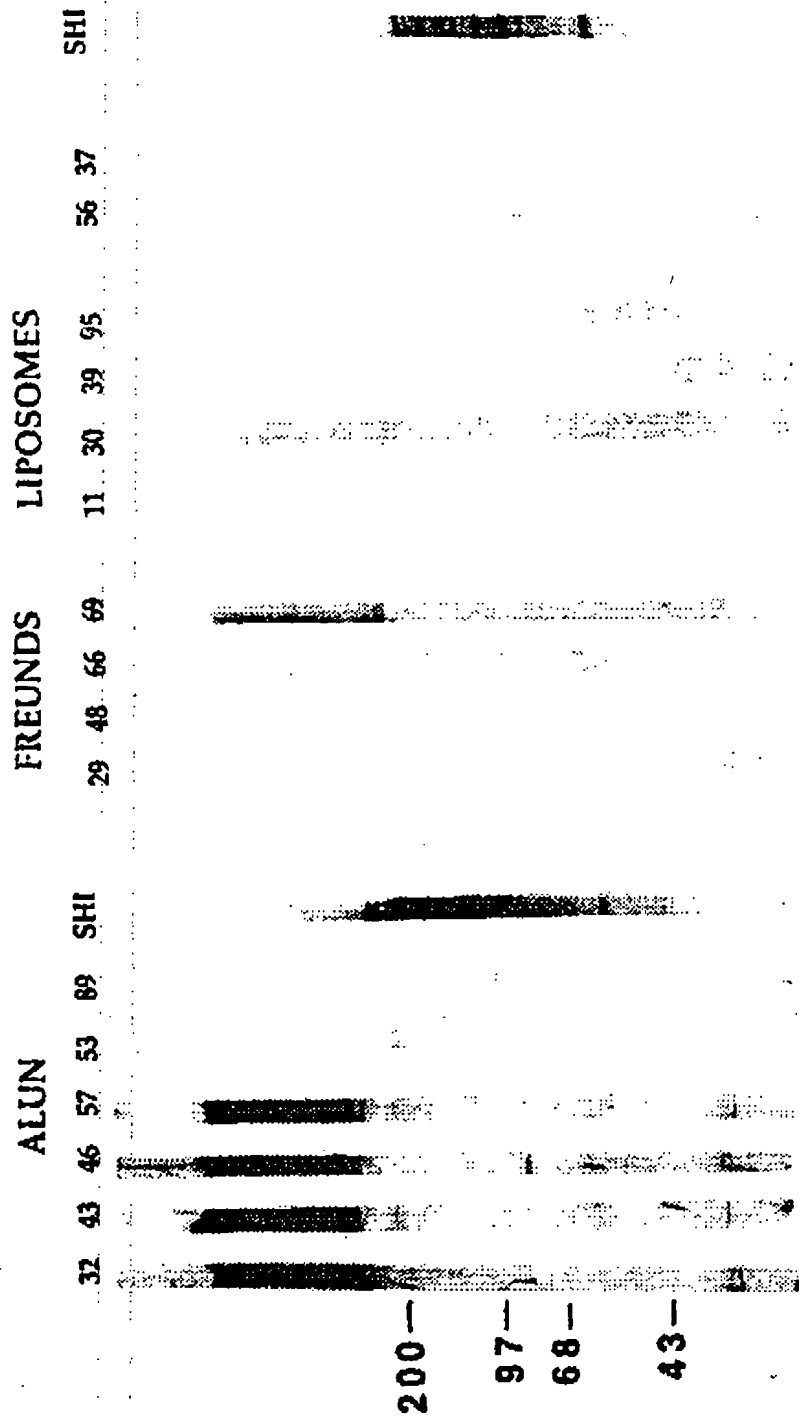
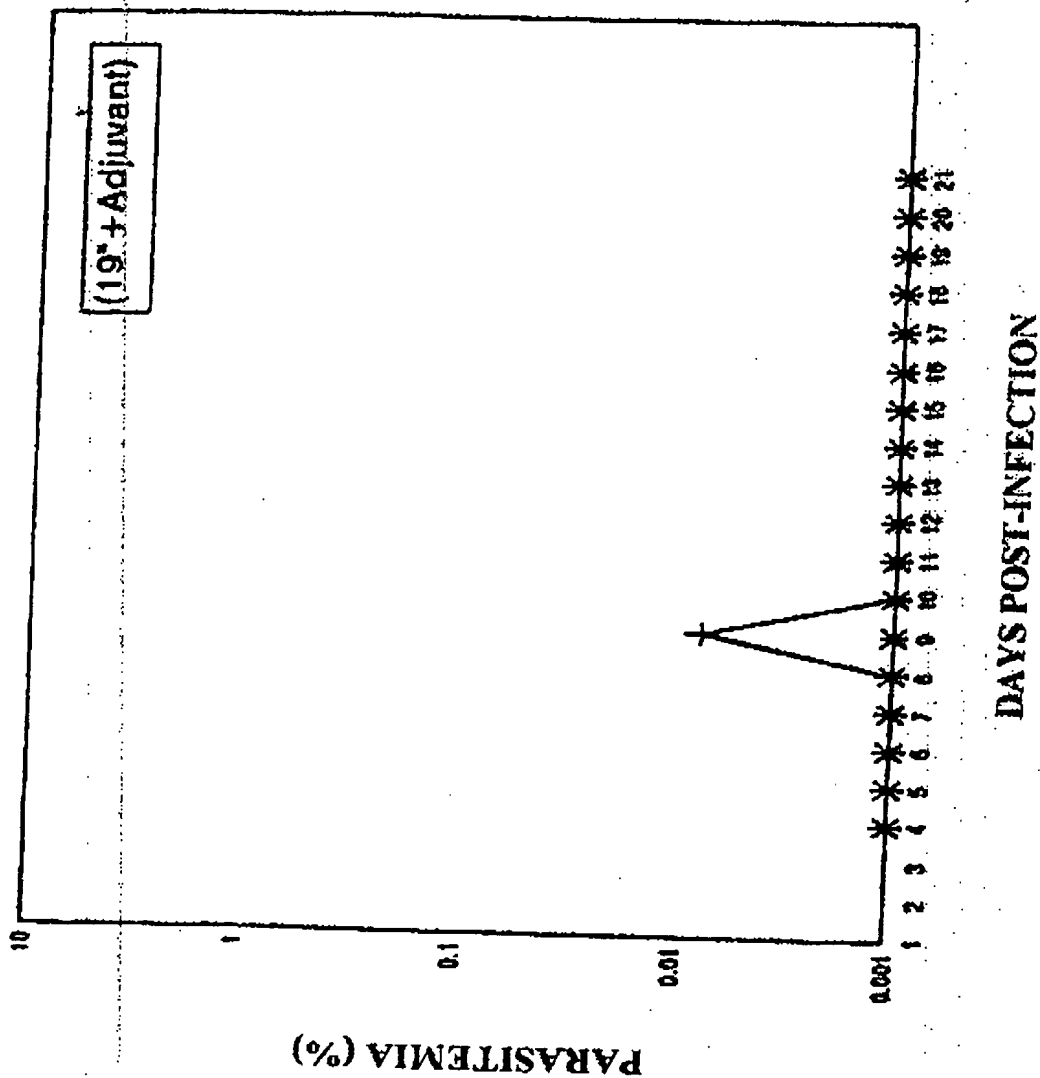


FIGURE 78

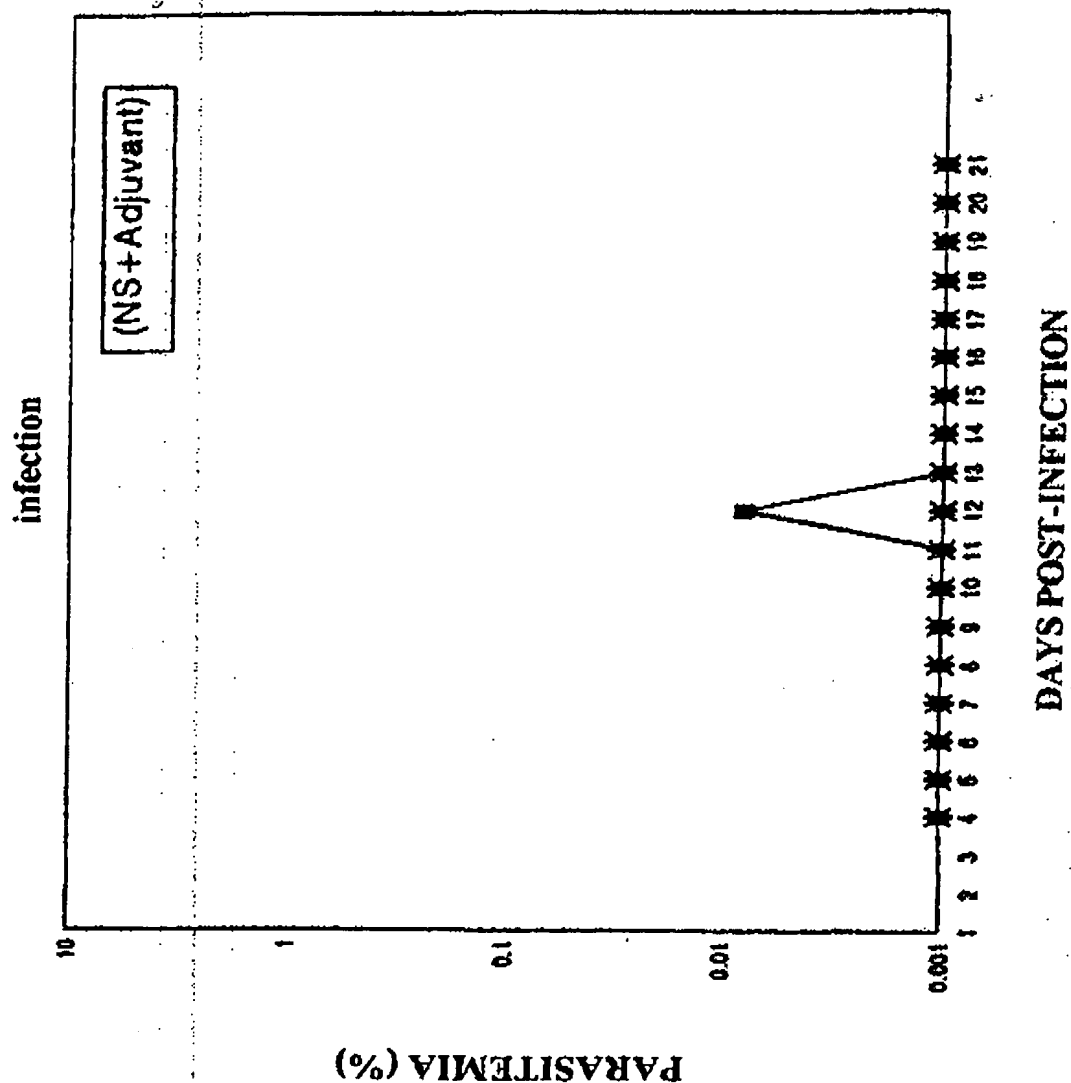
Vaccination test: recombinant MSP-1 (p19) of *Plasmodium cynomolgi* in the *Macaca sinica* toque
macaque; second challenge infection

FIGURE 8A



Vaccination test: recombinant MSP-1 (p19) of *Plasmodium cynomolgi* in the *Macaca sinica* toque macaque; second challenge

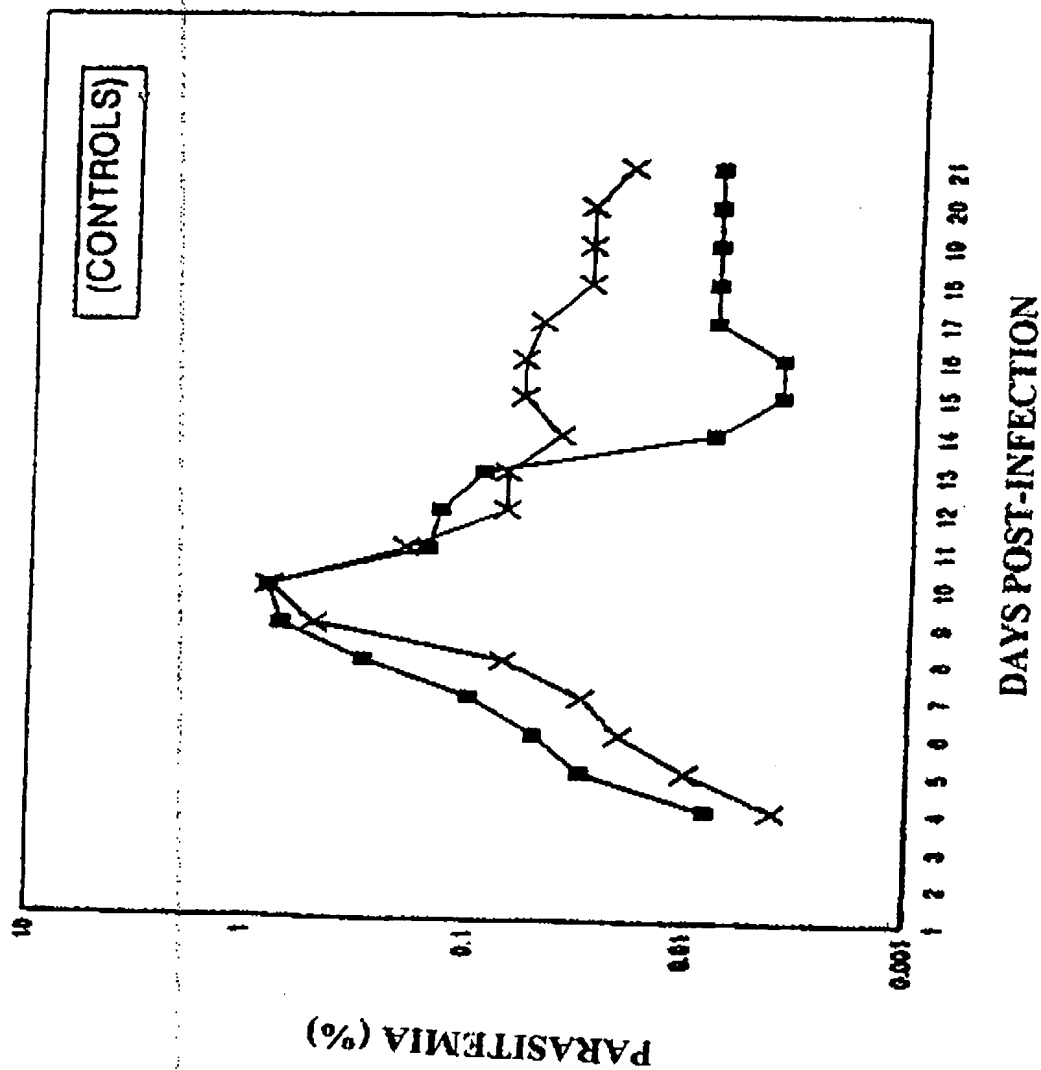
FIGURE 8B



Vaccination test: recombinant MSP-1 (p19) of *Plasmodium cynomolgi* in the *Macaca sinica* toque macaque; second challenge infection

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FIGURE 8C



Vaccination test: recombinant MSP-1 (p19) of *Plasmodium cynomori* in the
Macaca sinica toque macaque; second challenge infection

Year	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96
Month	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Days post-infection	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
Days after challenge	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	
Vaccination p19																			
T 426	-	-	-	-	-	.008	-	-	-	-	-	-	-	-	-	-	-	-	-
T 427	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
T 429	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Controls Physiological water PCA/FIA																			
T 436	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
T 425	-	-	-	-	-	-	-	-	.008	-	-	-	-	-	-	-	-	-	-
T 438	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Controls Non vaccinated																			
T 448	.008	.03	.05	0.1	0.3	0.7	0.8	.16	.14	.09	.008	.004	.004	.008	.008	.008	.008	.008	.008
T 449	.004	.01	.02	.03	0.07	0.5	0.8	0.2	.07	.07	.04	.06	.06	.05	.03	.03	.03	.03	.02

- = Absence of parasites in 400 microscopic fields

FIGURE 80

FIGURE 9A

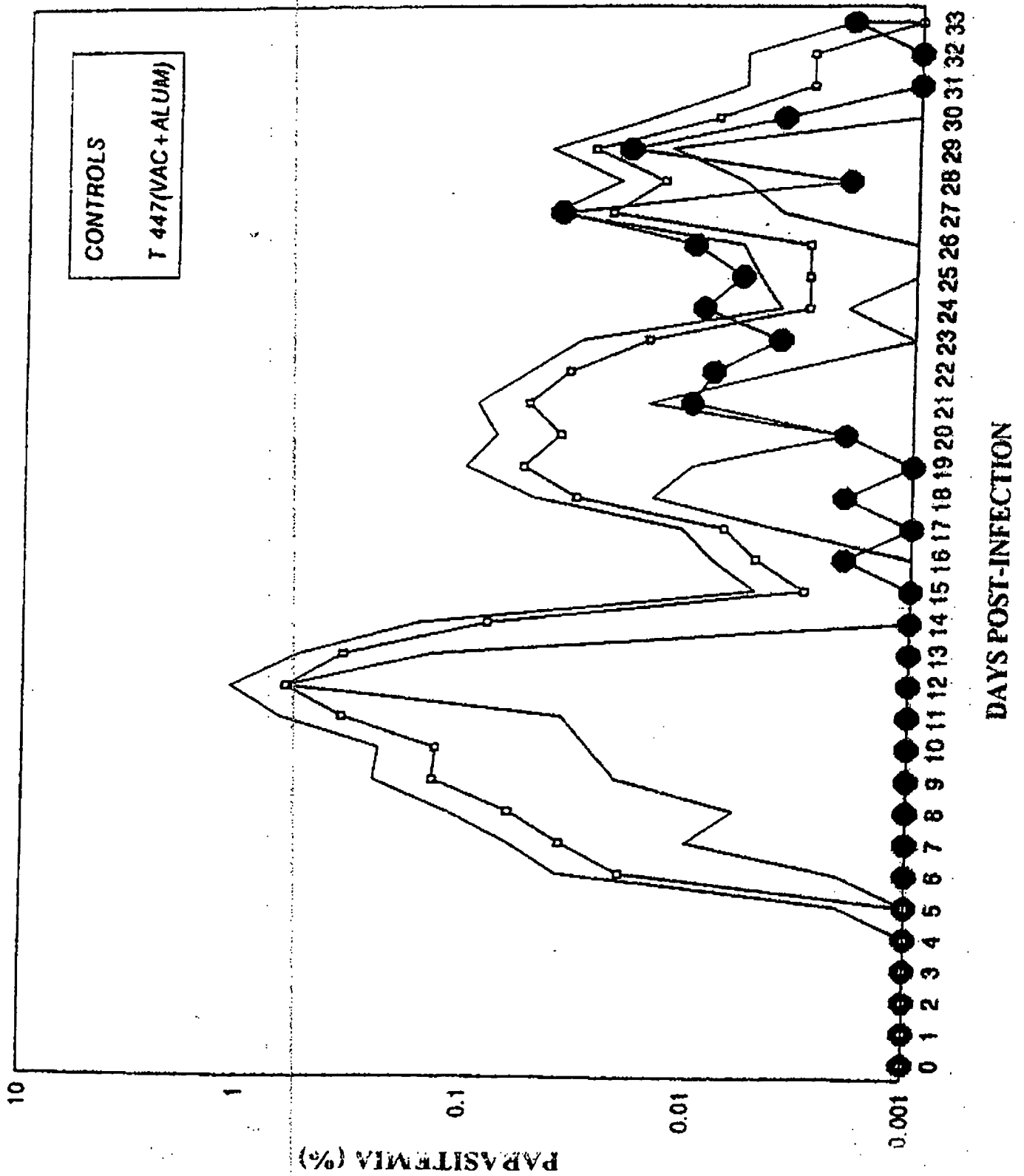


FIGURE 9B

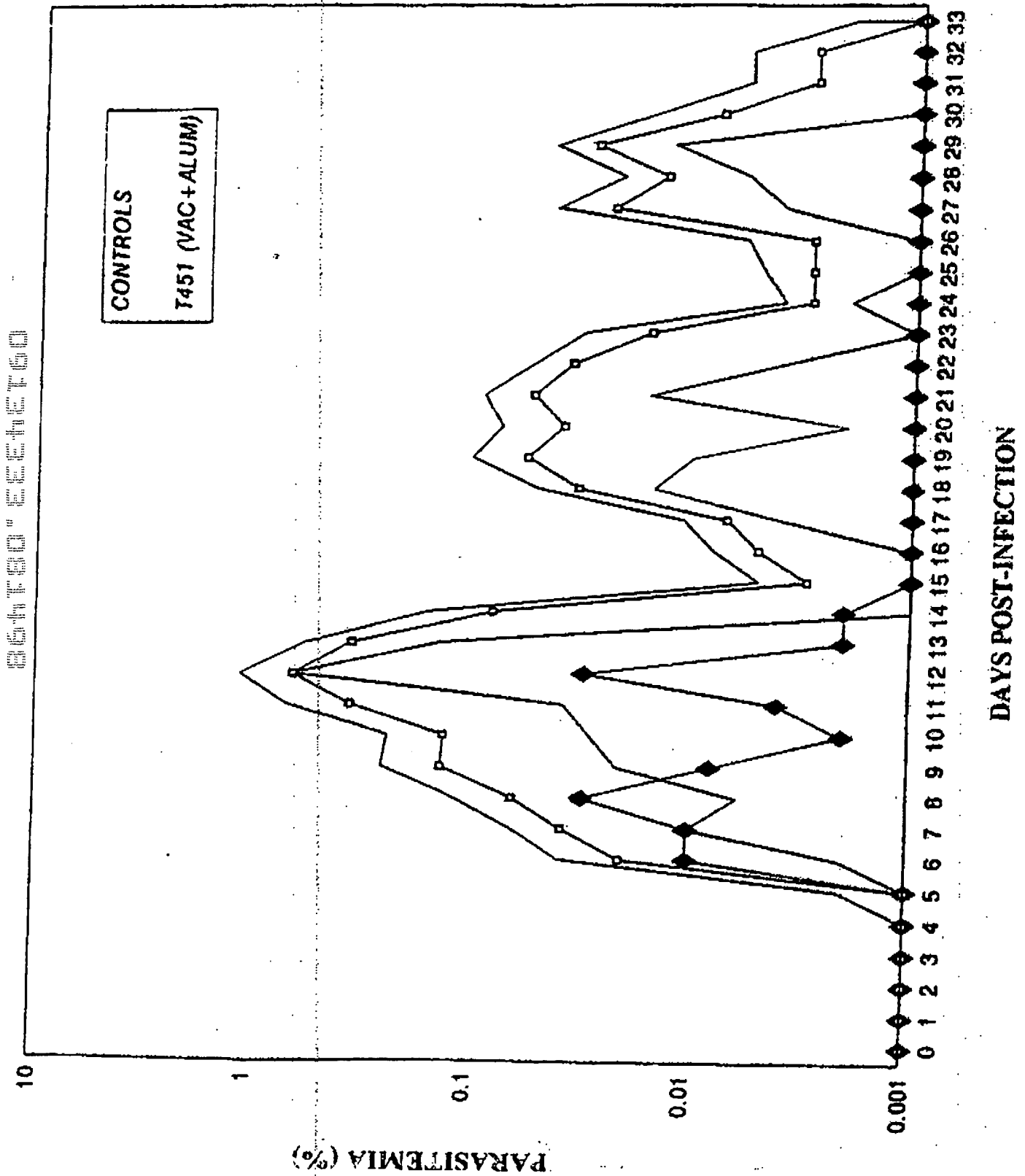


FIGURE 9C

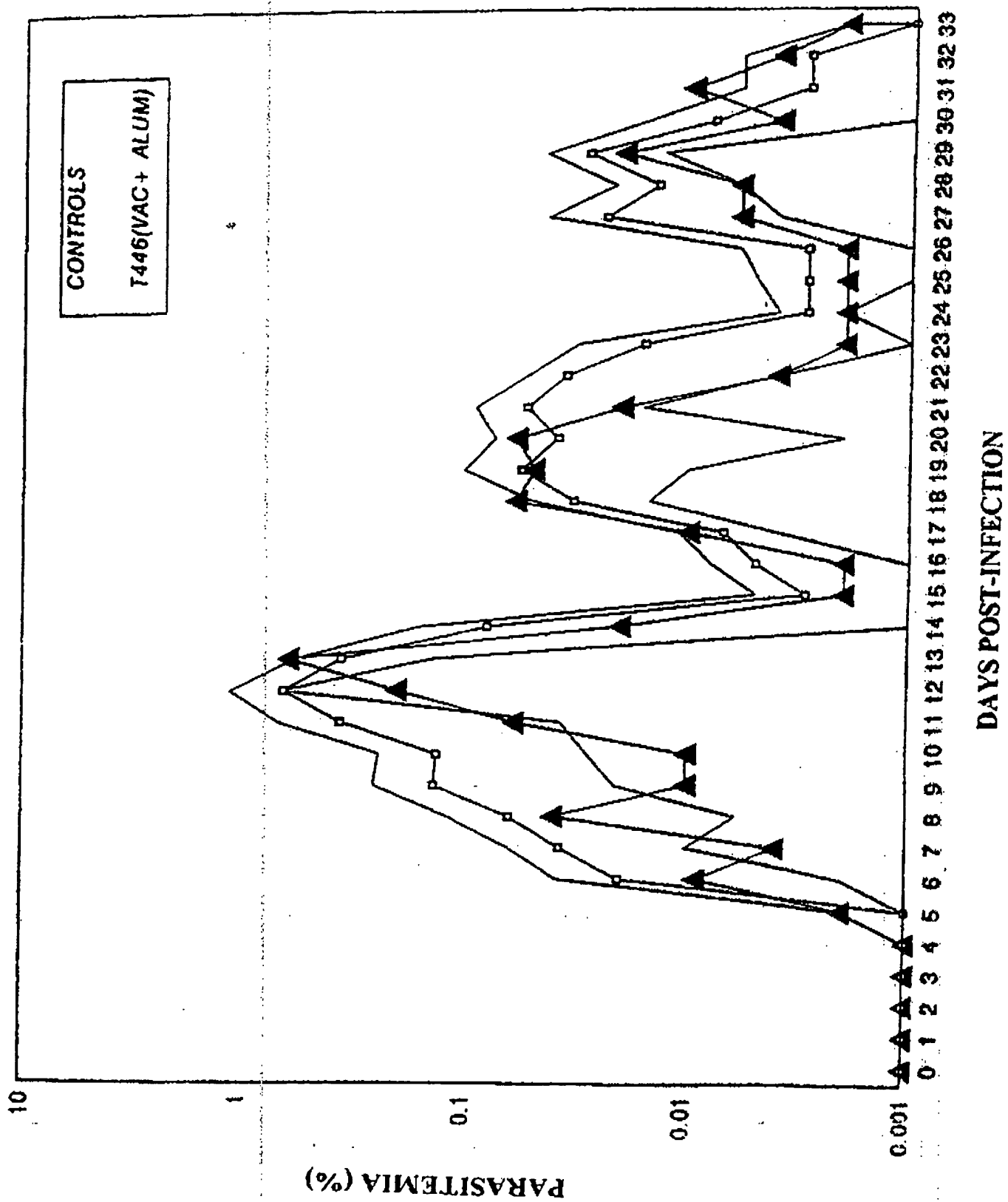
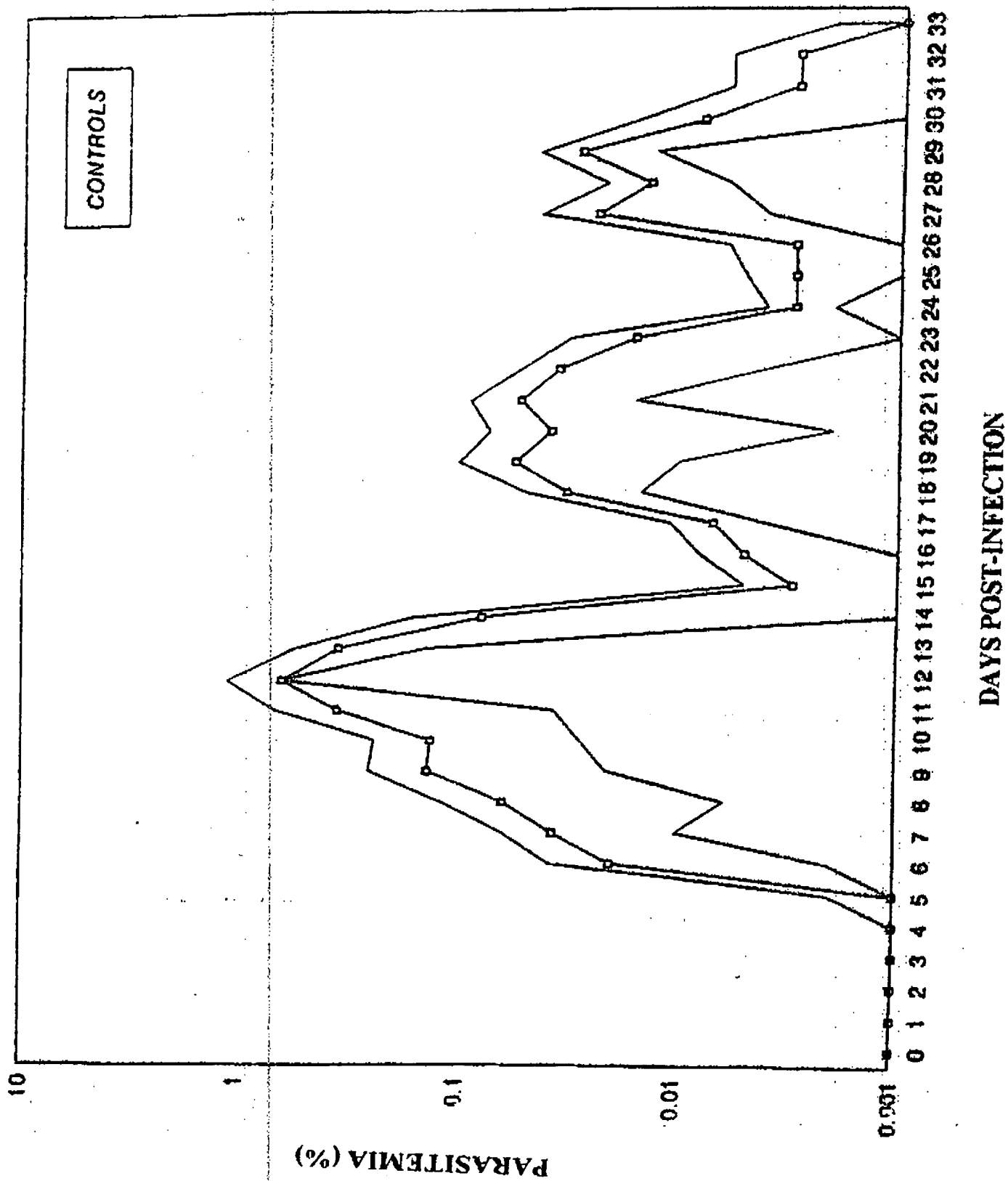


FIGURE 90

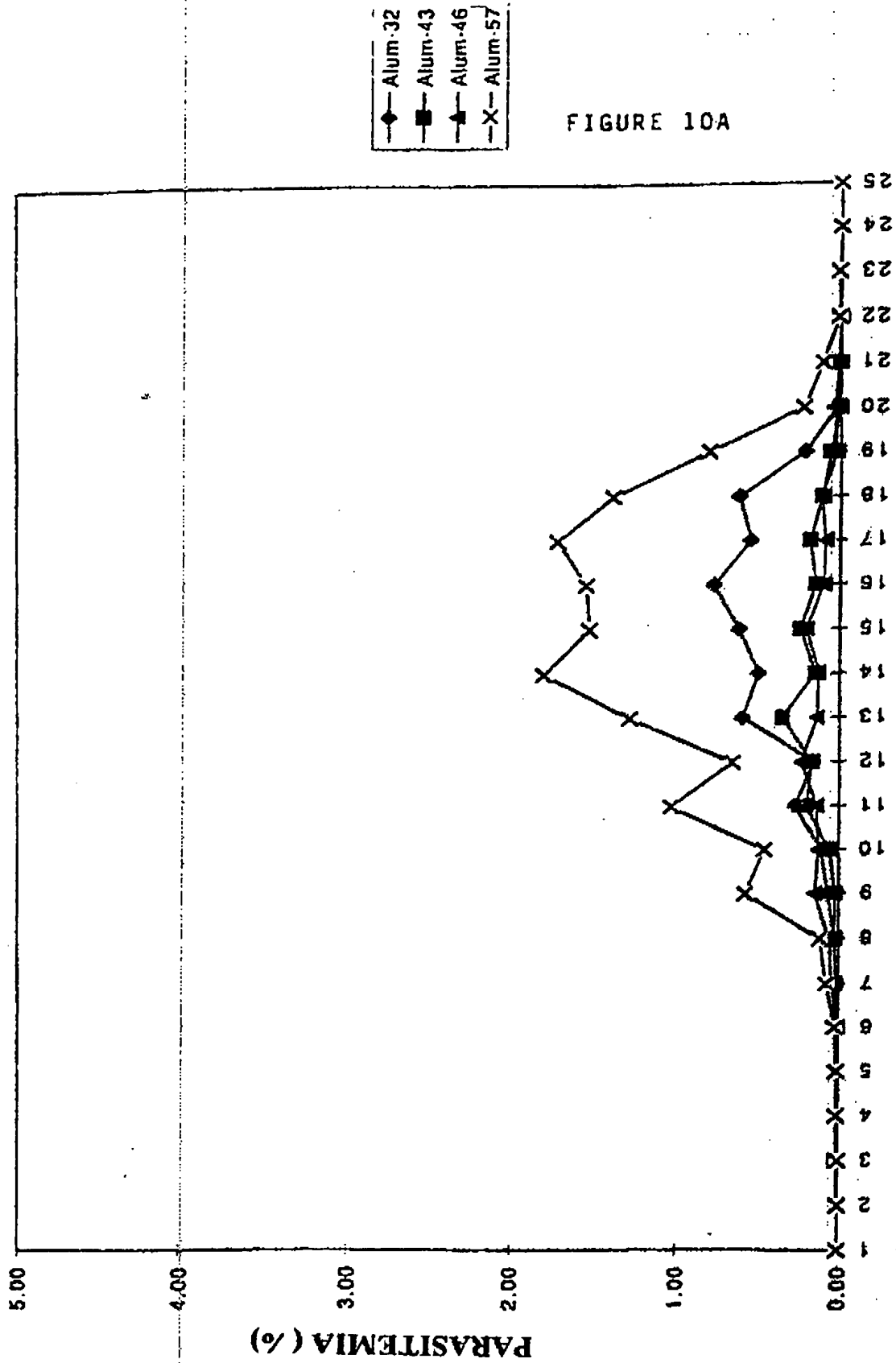


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FIGURE 9E

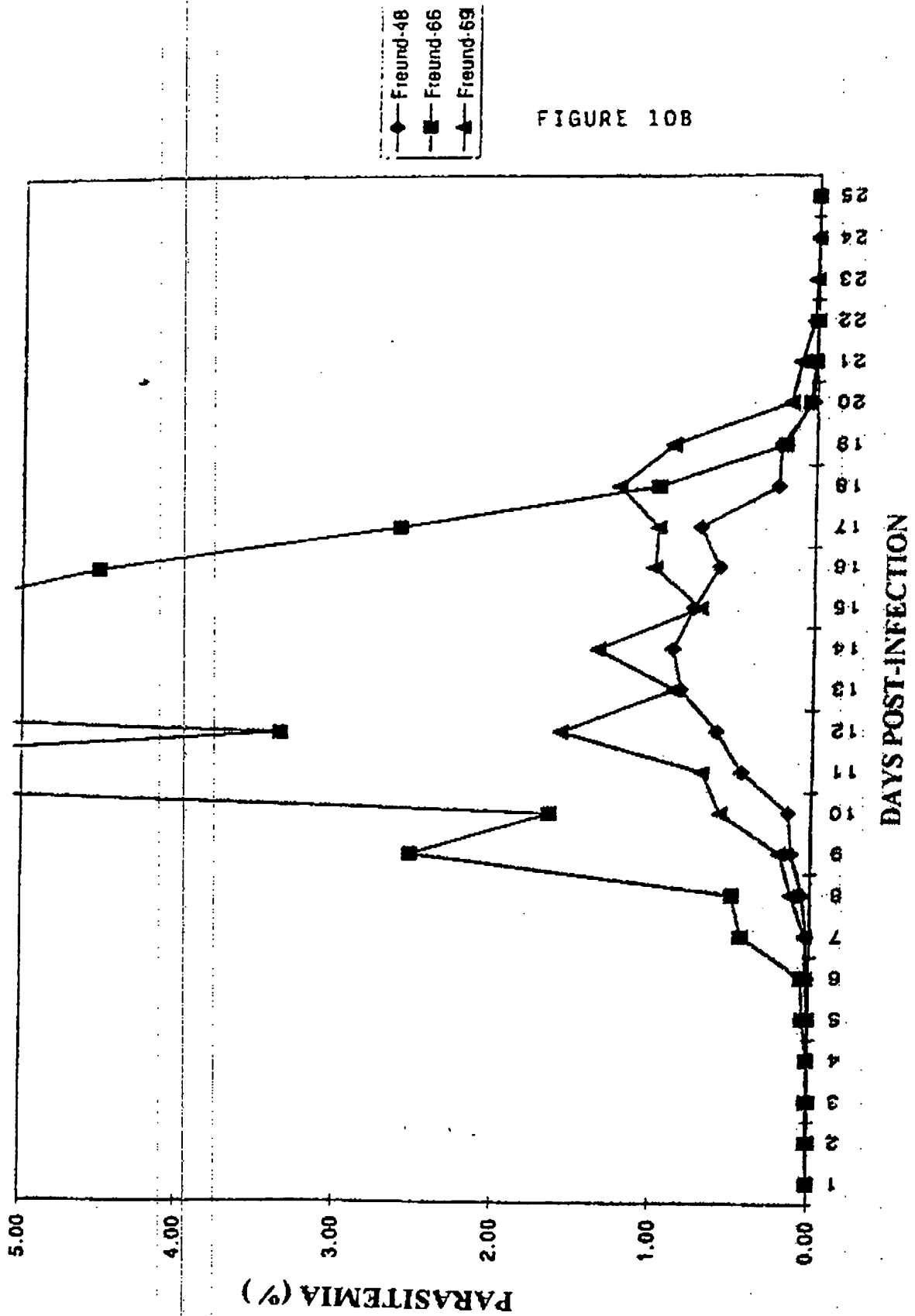
-- negative for parasites in 400 microscopic fields

PLASMODIUM FALCIPARUM VACCINATION TEST IN SAIMIRI
SCIUREUS SQUIRREL MONKEY
MSP-1 p19 VACCINATION WITH ALUM

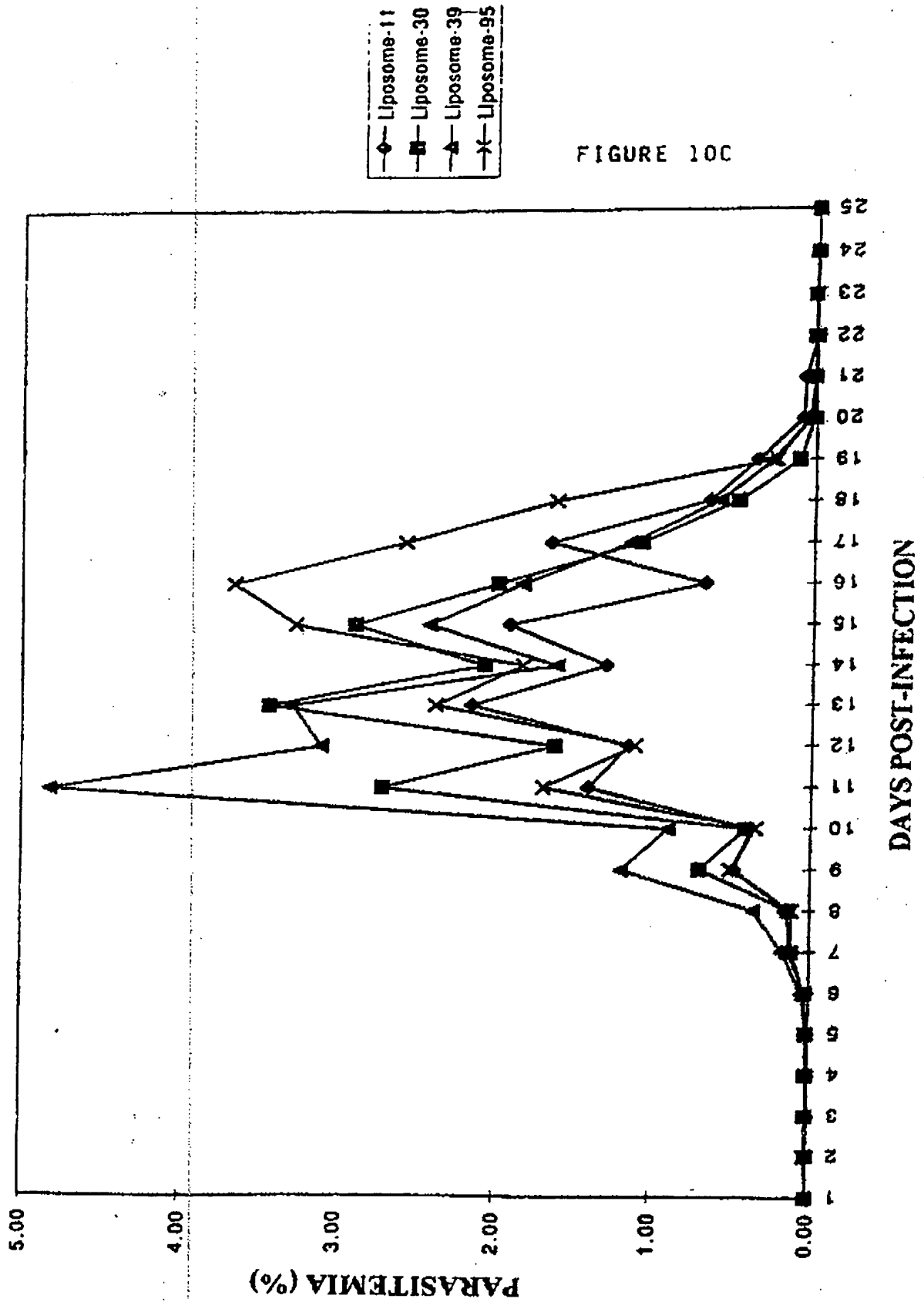


PLASMODIUM FALCIPARUM VACCINATION TEST IN SAIMIRI
SCIUREUS SQUIRREL MONKEY

MSP-1 p19 VACCINATION WITH FREUNDS



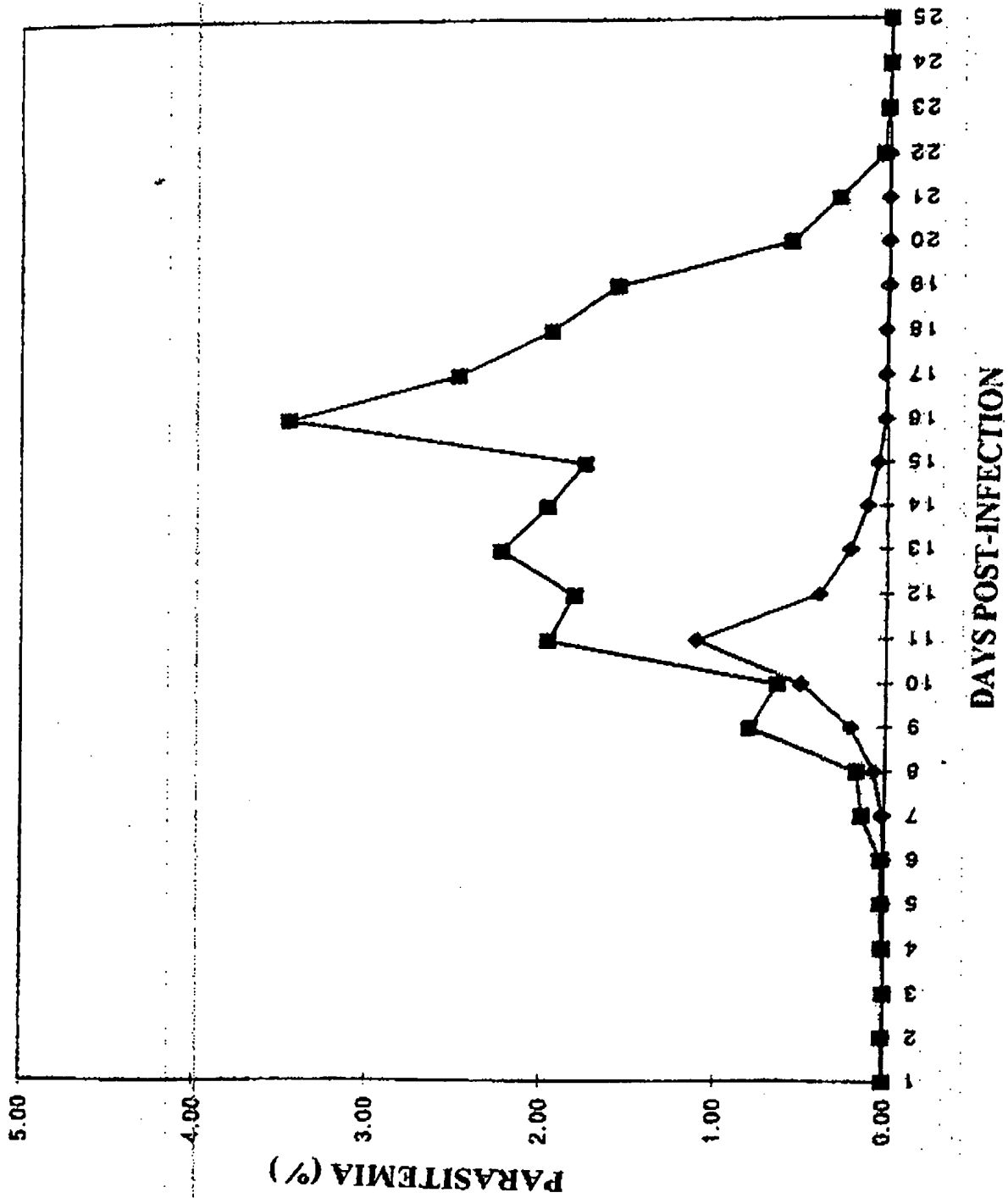
PLASMODIUM FALCIPARUM VACCINATION TEST IN SAIMIRI
 SCIUREUS SQUIRREL MONKEY
 MSP-1 p19 VACCINATION WITH LIPOSOMES



PLASMODIUM FALCIPARUM VACCINATION TEST IN SAIMIRI

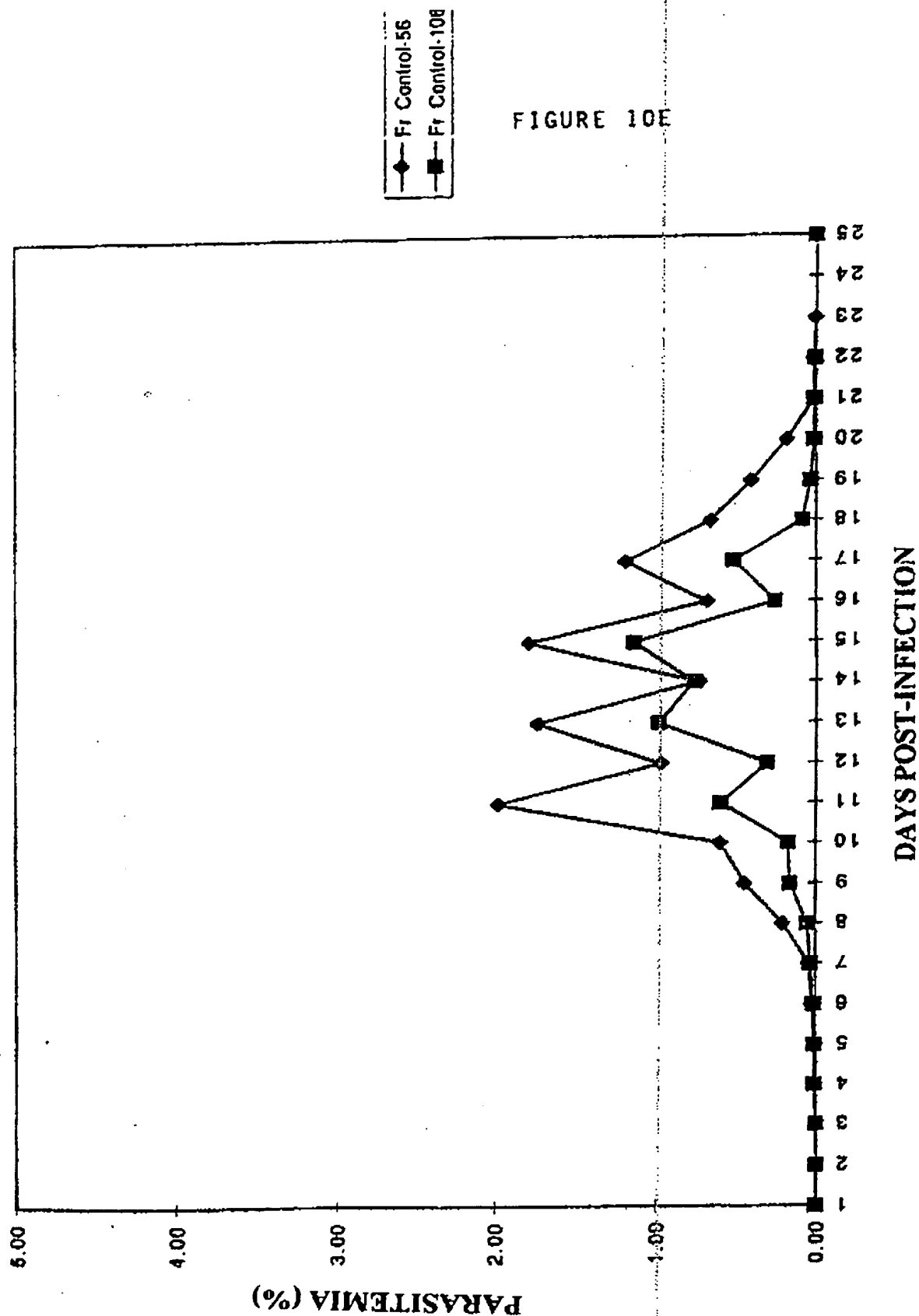
SCIUREUS SQUIRREL MONKEY

ALUM CONTROL



30/59

FIGURE 10E



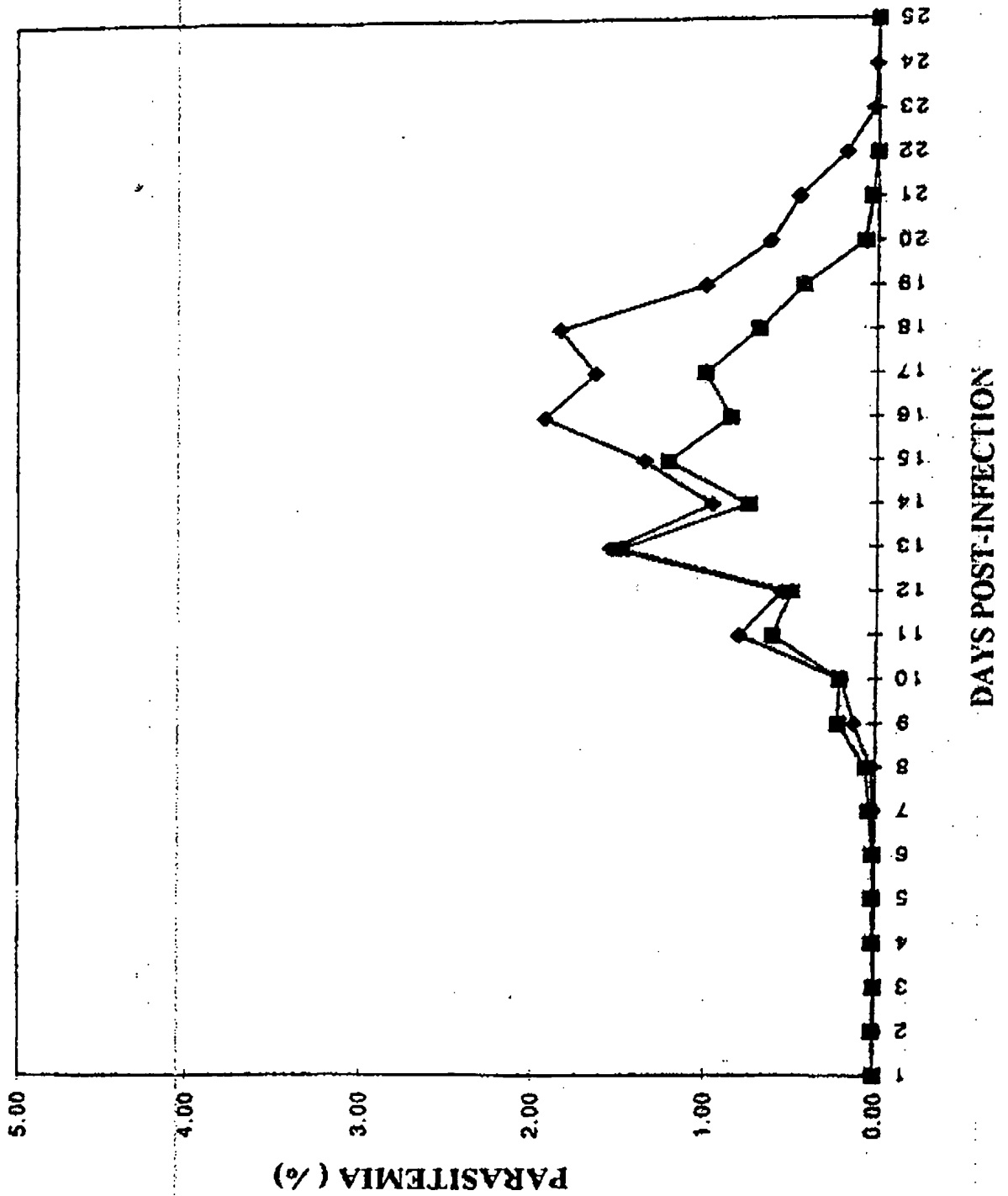
PLASMODIUM FALCIPARUM VACCINATION TEST IN SAIMIRI

SCIUREUS SQUIRREL MONKEY

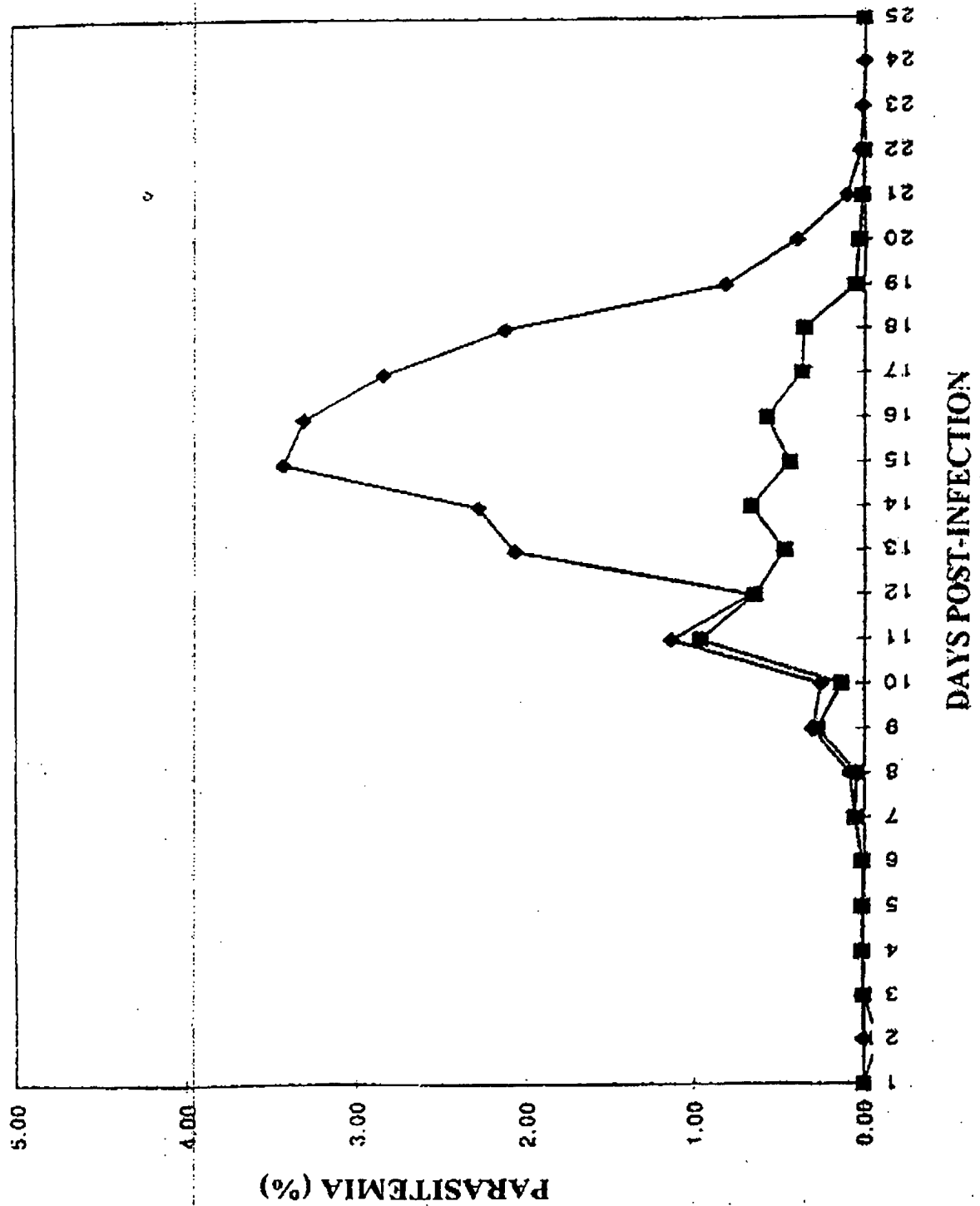
LIPOSOME CONTROL

31/59

FIGURE 10F



PLASMODIUM FALCIPARUM VACCINATION TEST IN SAIMIRI
SCIUREUS SQUIRREL MONKEY
PHYSIOLOGICAL WATER CONTROL



S64T60"CE44T60

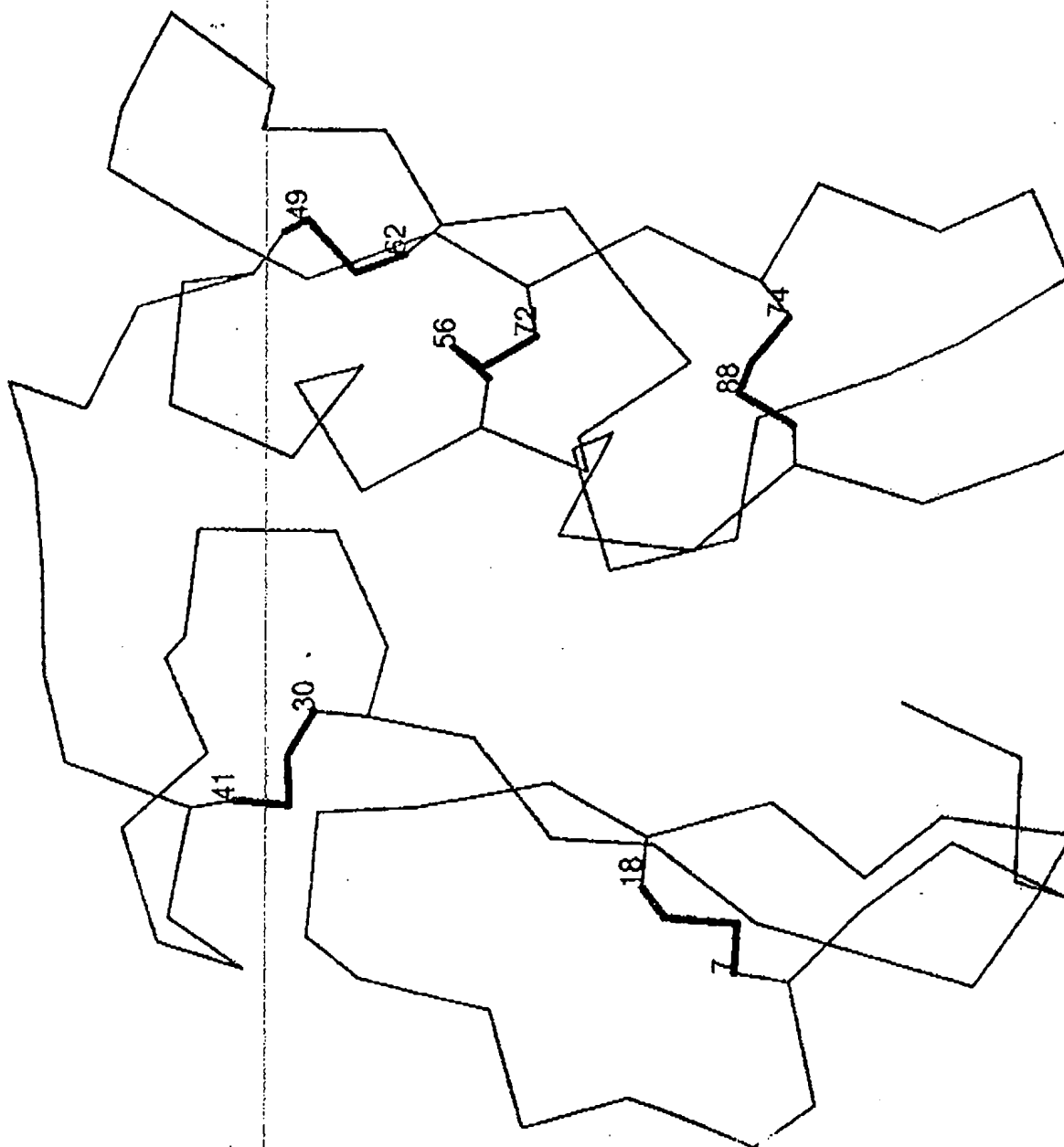


Figure 11A: Backbone of MSP1(19) showing disulfide bridges in bold line

B64T80" EETHET60

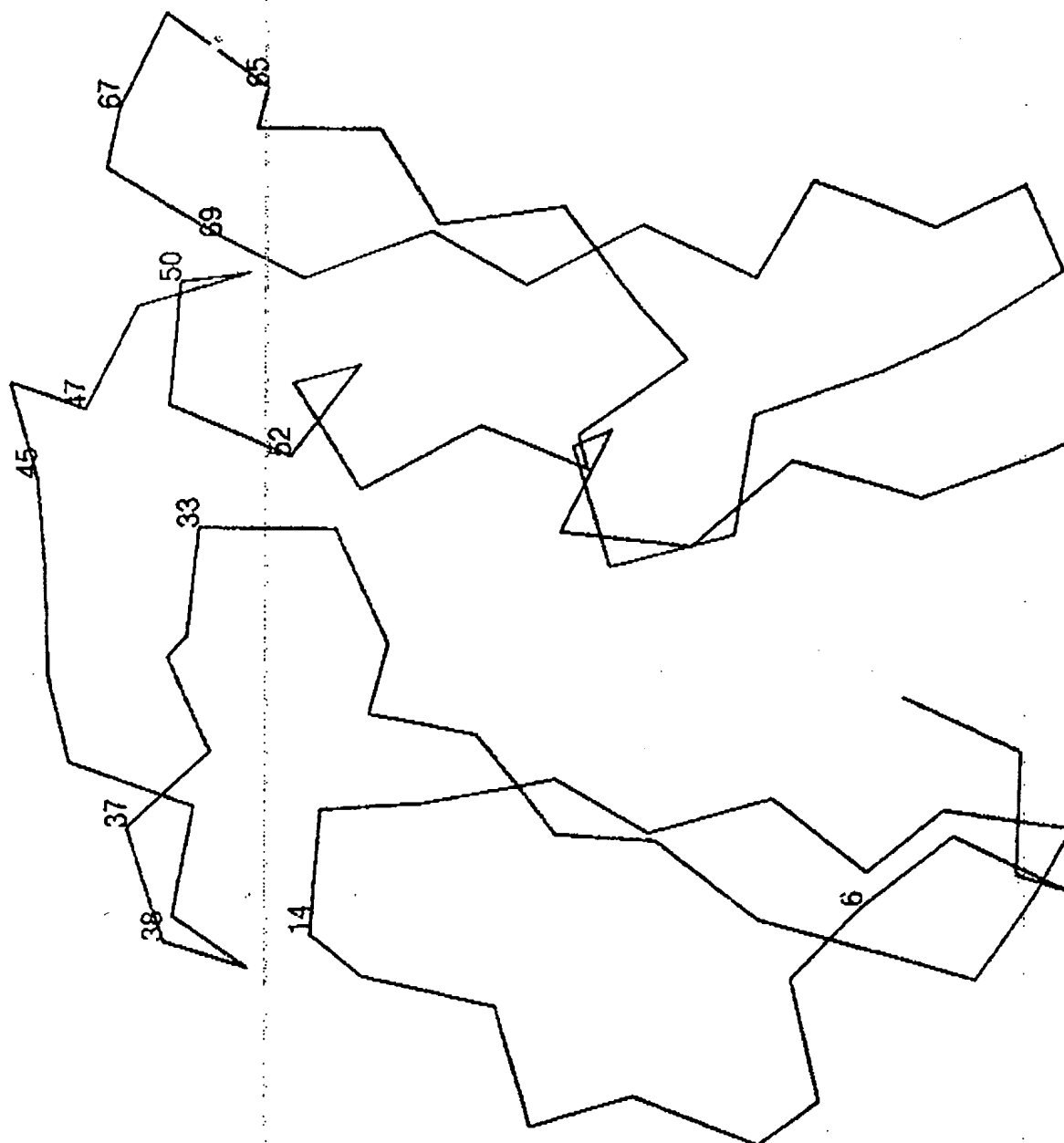


Figure 11B: Backbone of MSP1(19) showing positions of sequence differences between *P. cynomolgi* and *P. vivax*

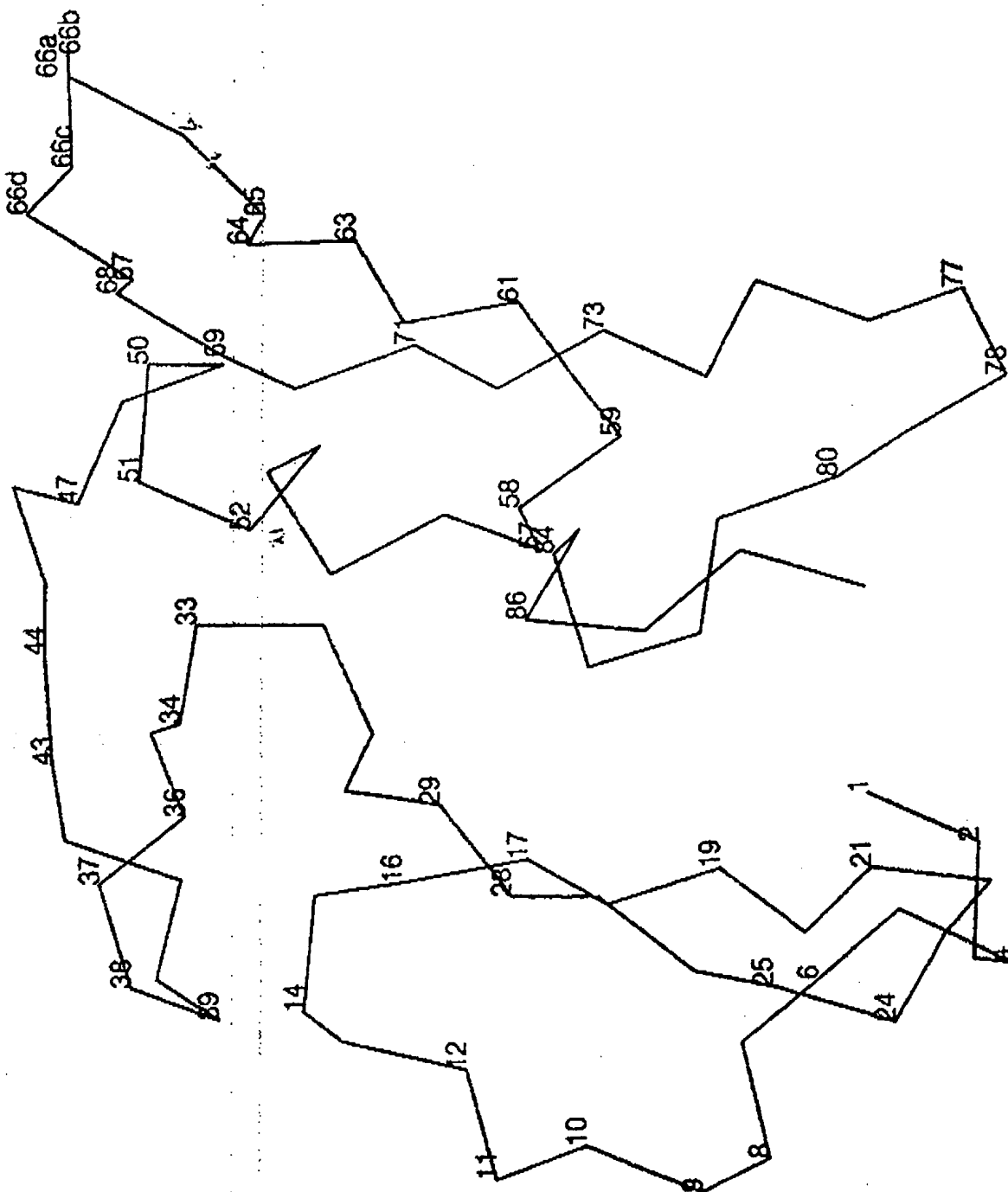
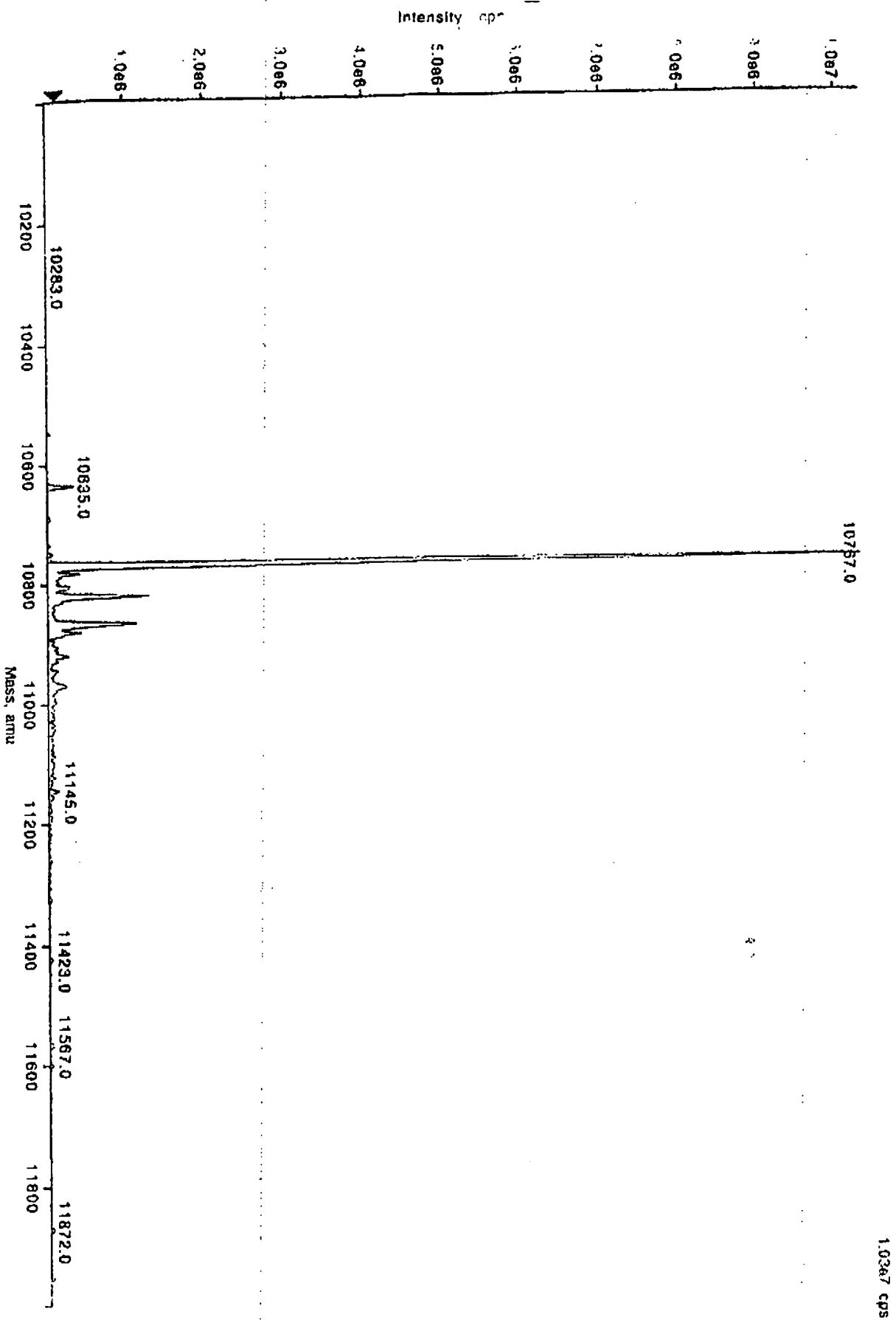


Figure 11C: Backbone of homology-modelled MSP1(19) of *P. falciparum* with positions of sequence differences with *P. cynomolgi*

U

FIGURE 12A (RECONSTRUCTED MASS SPECTRA P. CYNOMOL.GD)

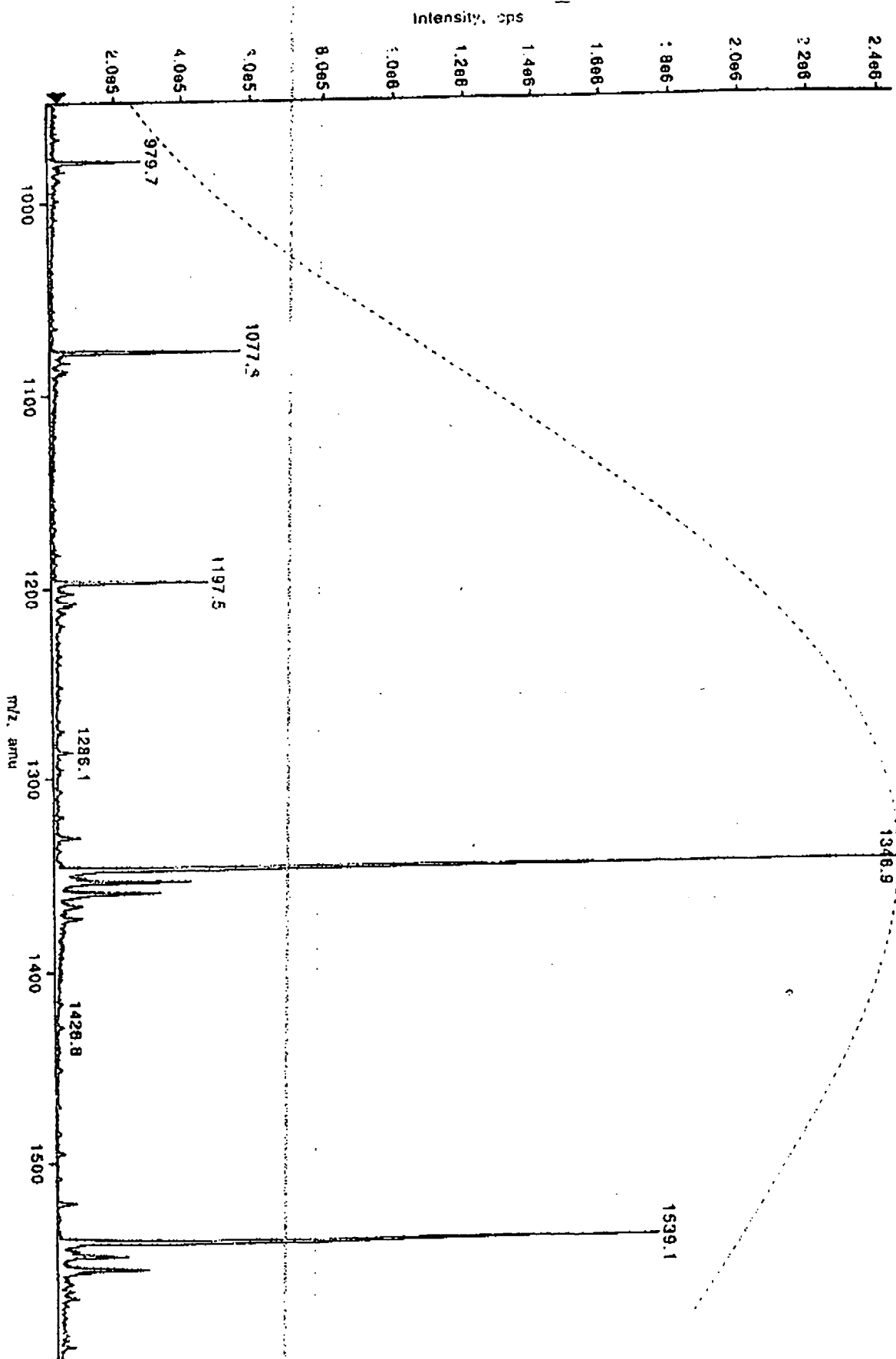


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09134333.001490

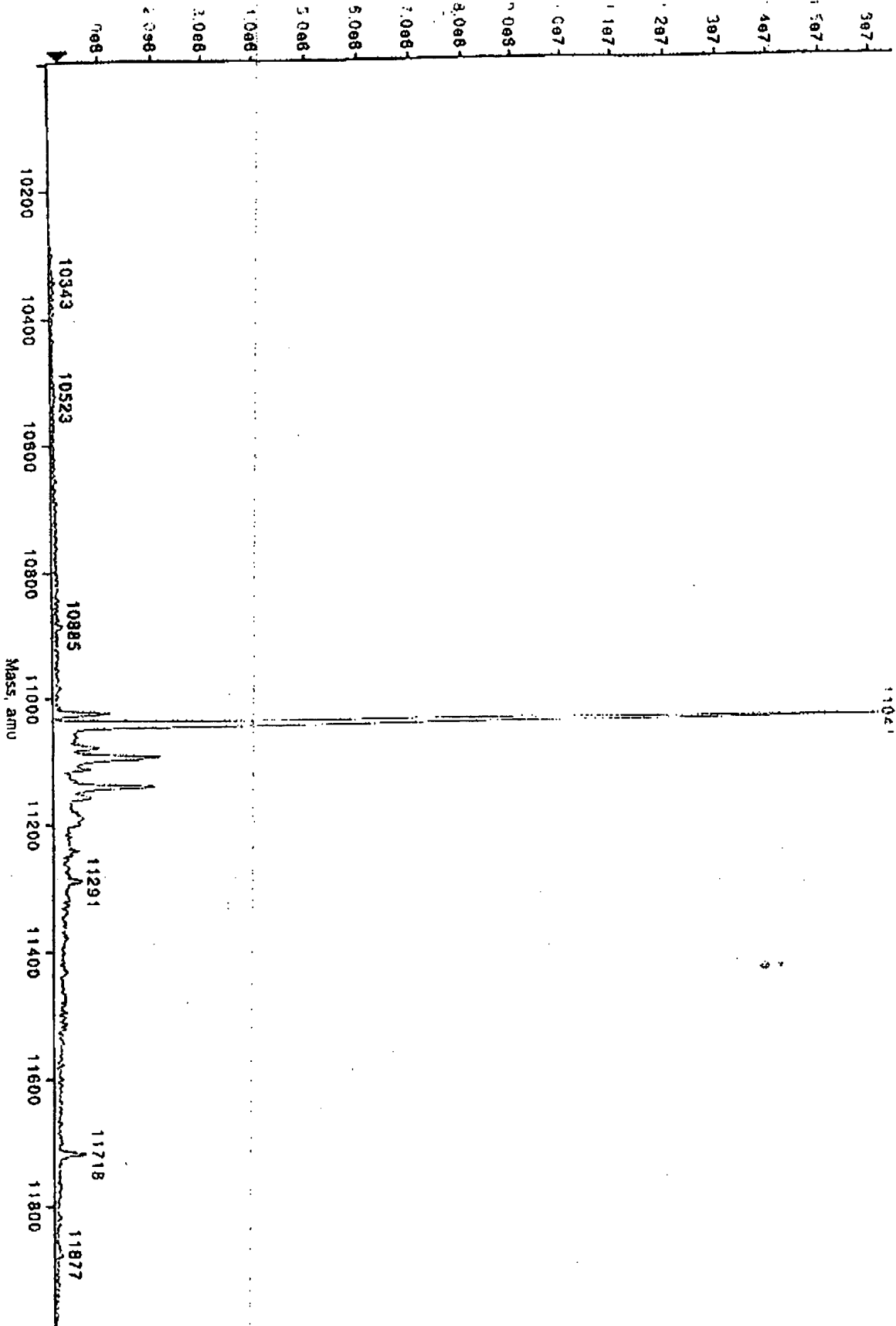
FIGURE 12B (m/z SPECTRA P. CYNOMOLGI)

2 cps



09134333.001490

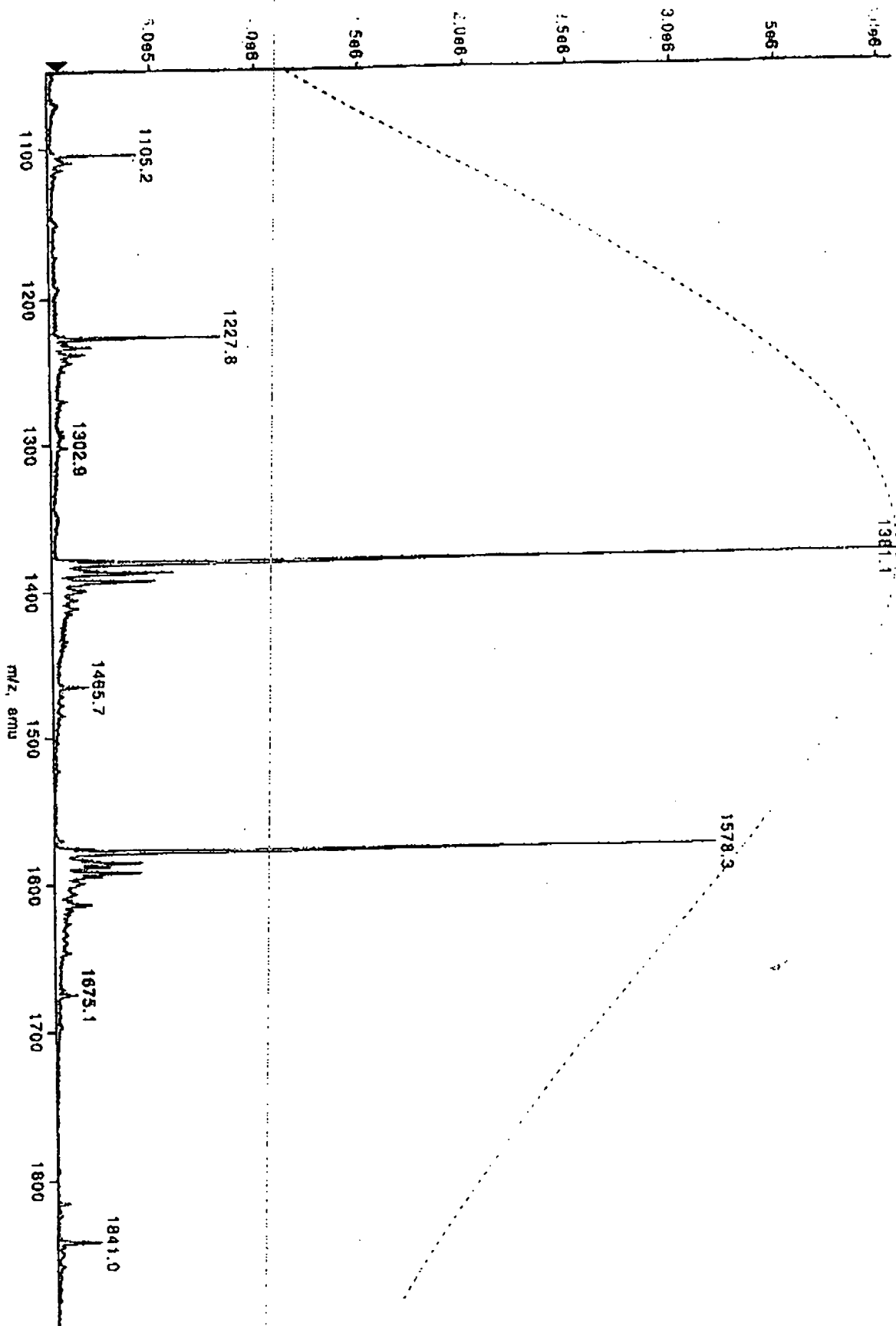
1556' 205

[illegible]

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Intensity, cps

FIGURE 12D (m/z SPECTRA P. FALCIPARUM)



4.07e6 cps

09134333.001492

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% Intensity

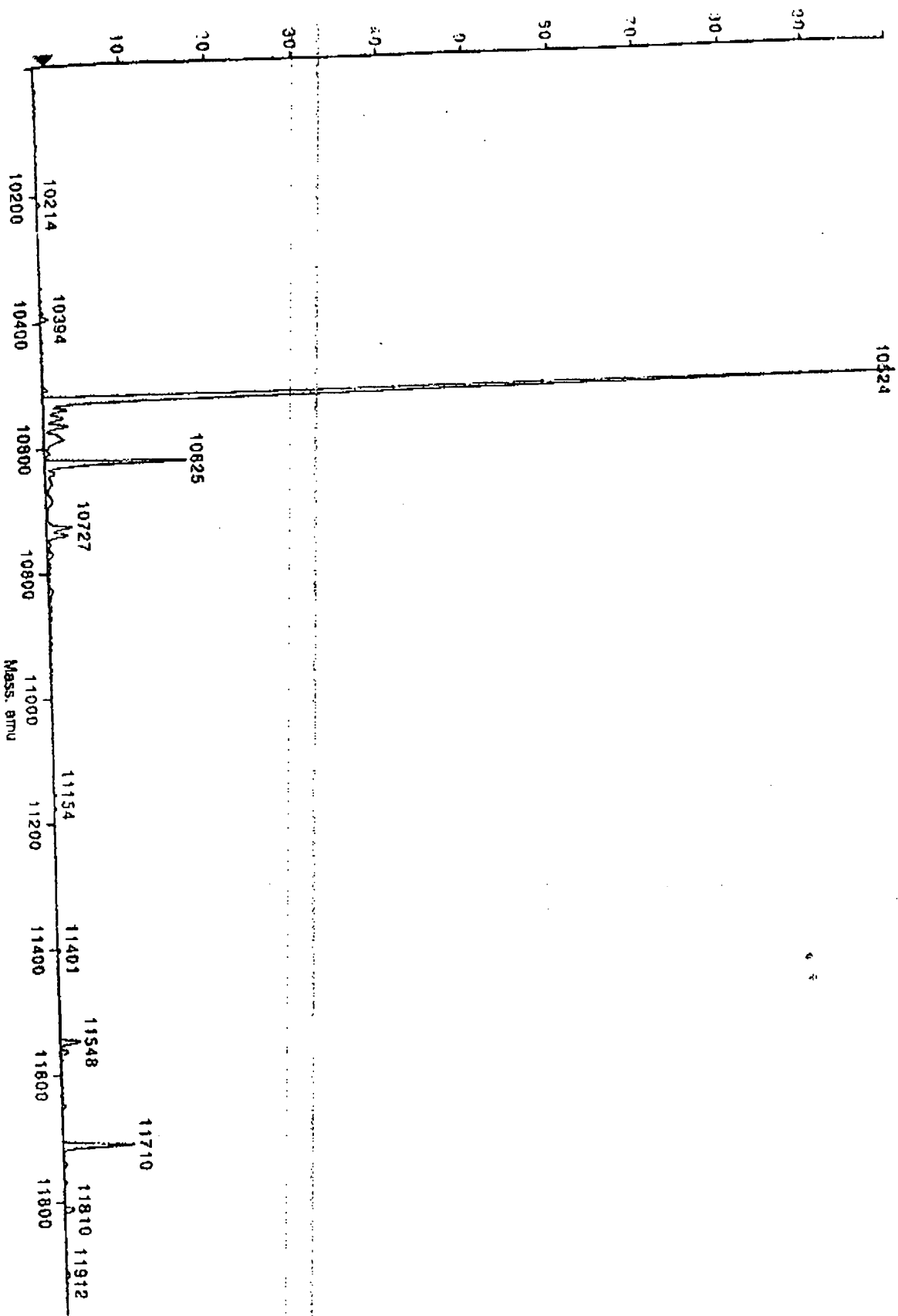


FIGURE 12E (RECONSTRUCTED MASS SPECTRA P. VIVAX)

1.97e7 cps

09134233 001498

FIGURE 12F (m/z SPECTRA P. VIVAX)

BiM: 1.3.1
 SLSV1919MMSpo/23/7/98 (Inst: Paster#CSM#AP355#Stney Longacre/SV19H prep 7/7/98 P.Vivax MSP1 p1960 100ul [10%HCOOH/MeOH 1/1] @ Int. Sp/Min 10n5m
 Period 1, Expt 1: Mass range: 1150.0 to 1800.0 by 0.1 amu; Dwell: 2.0 ms; Pause: 2.0 ms
 Acq. Time: Jan 23 1998 at 10:50:11

+Q1 MCA (10 scans): from SLSV1919MMSpo/23/7/98

3.71e6 cps

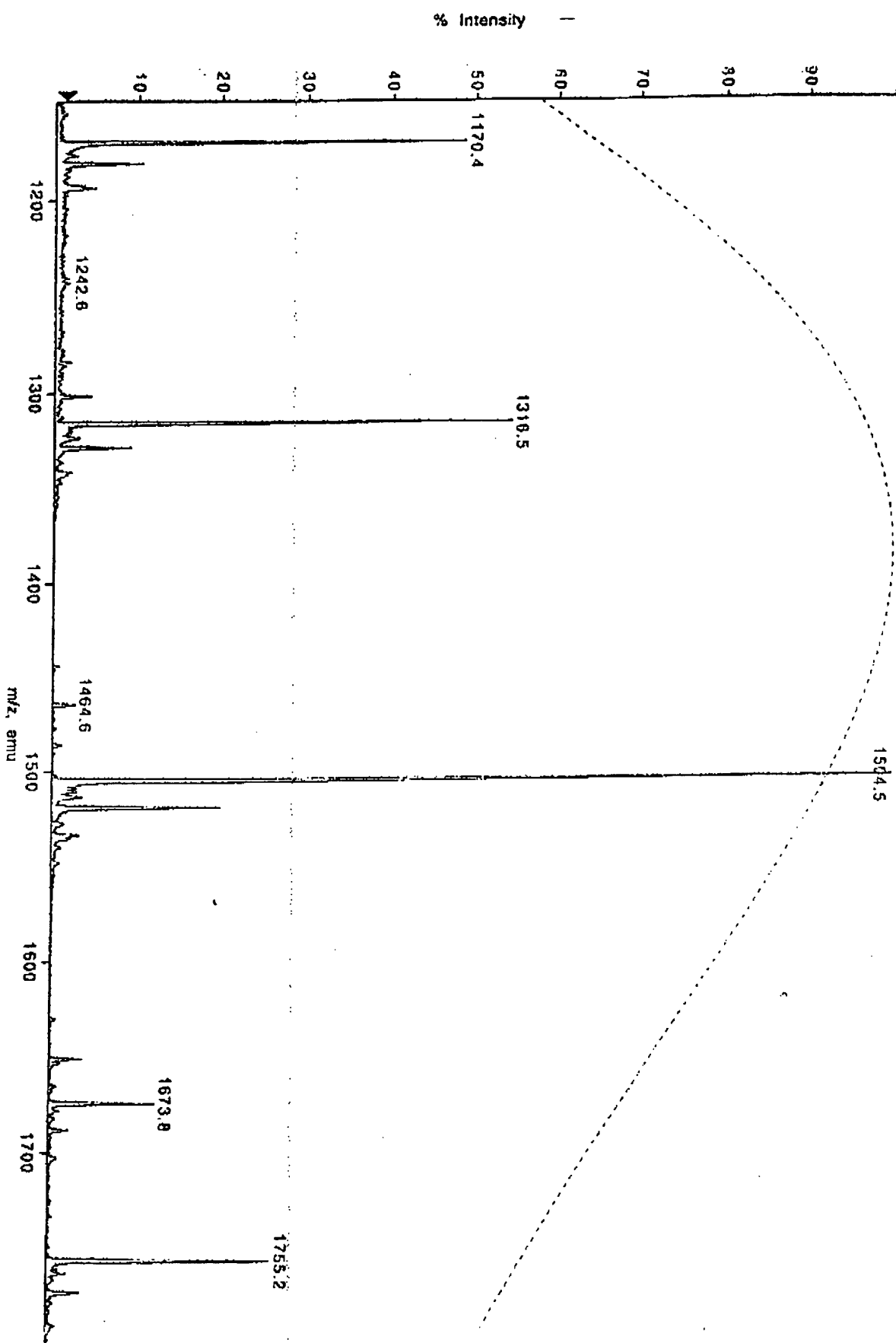
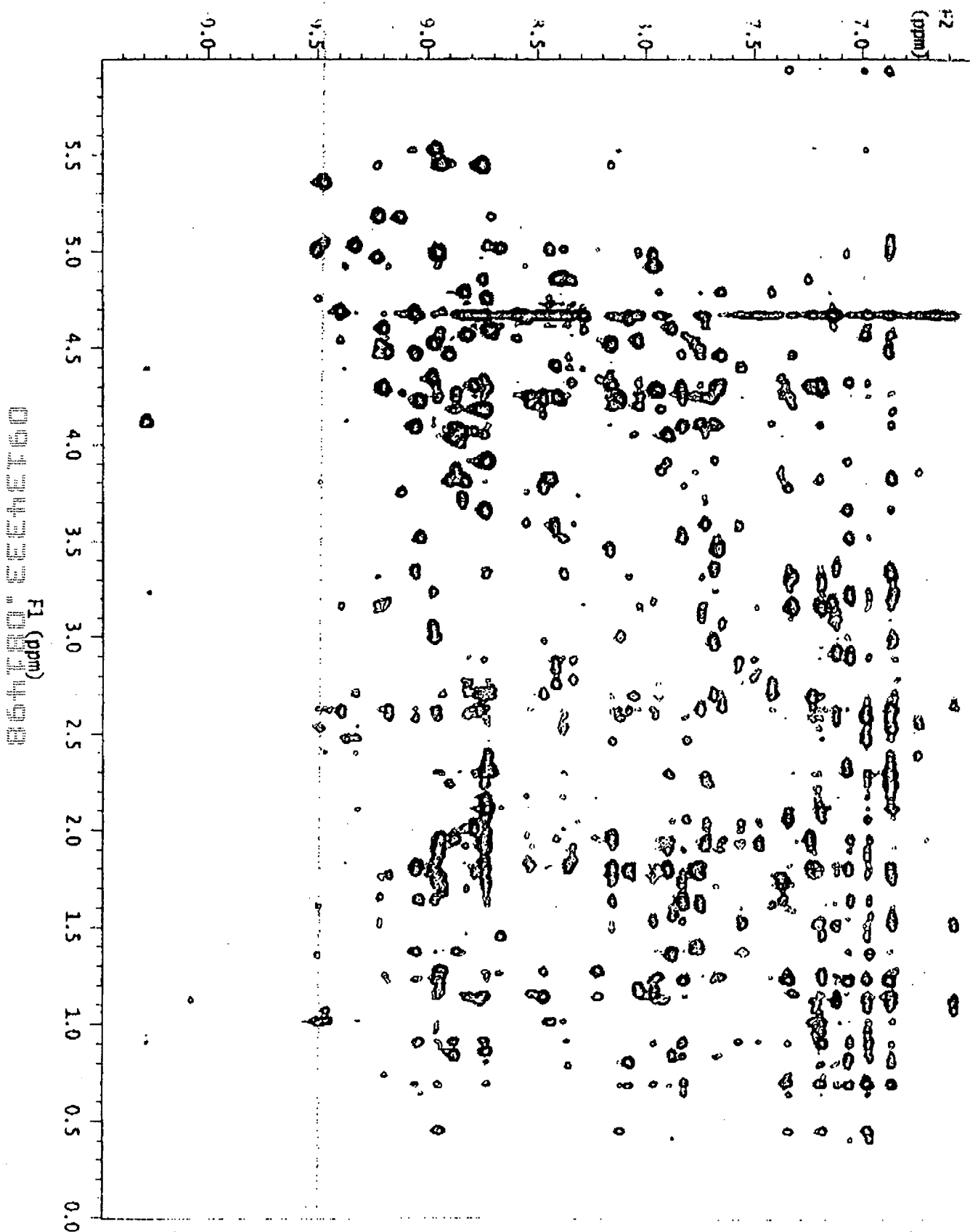


FIGURE 12.0a (NOEST CYNOMOLGID)



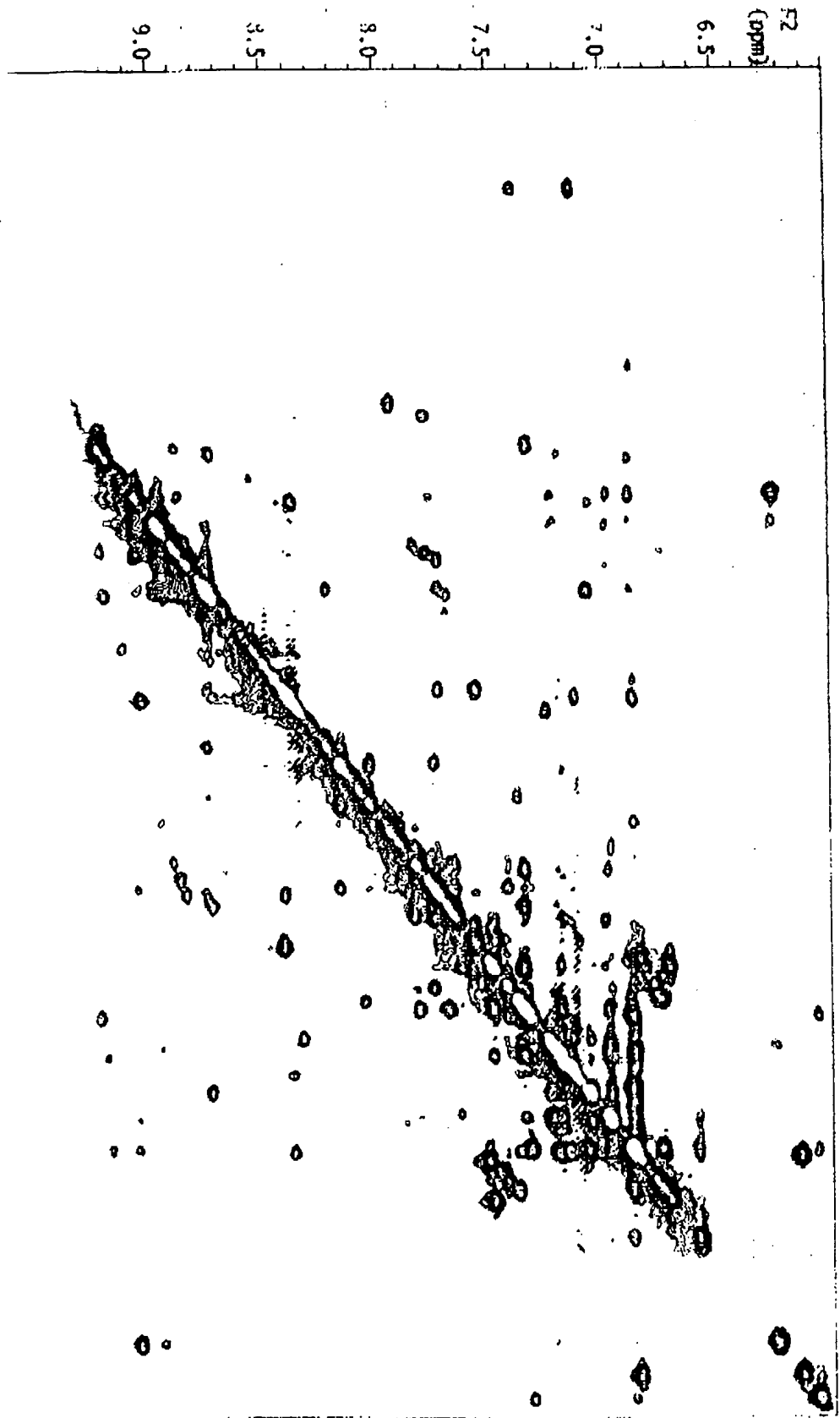


FIGURE 12.0b (NOESY CYNOXMOLOGI)

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FIGURE 12.6C (TOCSY CYANOMOLGI)

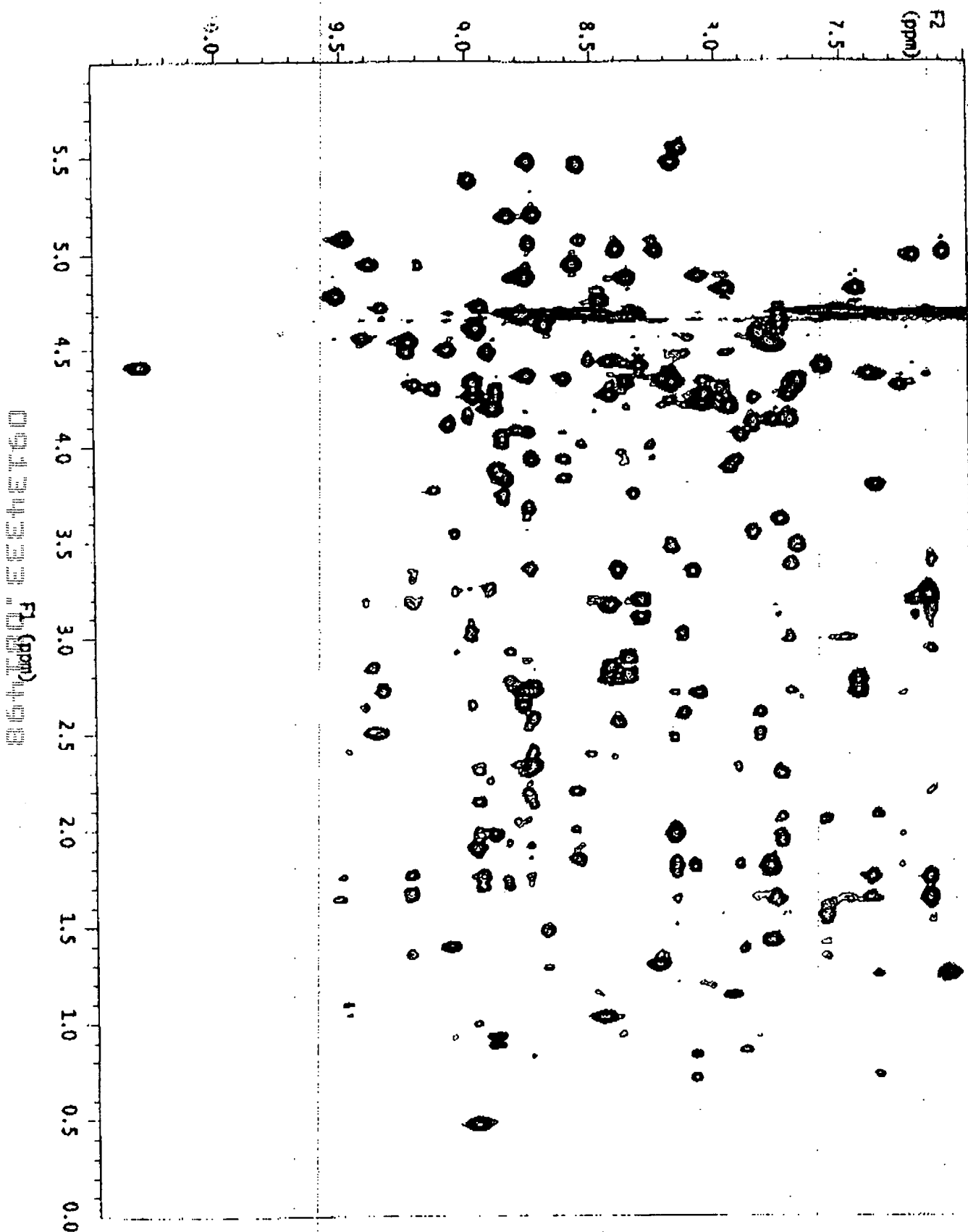


FIGURE 12.1a (NOESY VIVAX)

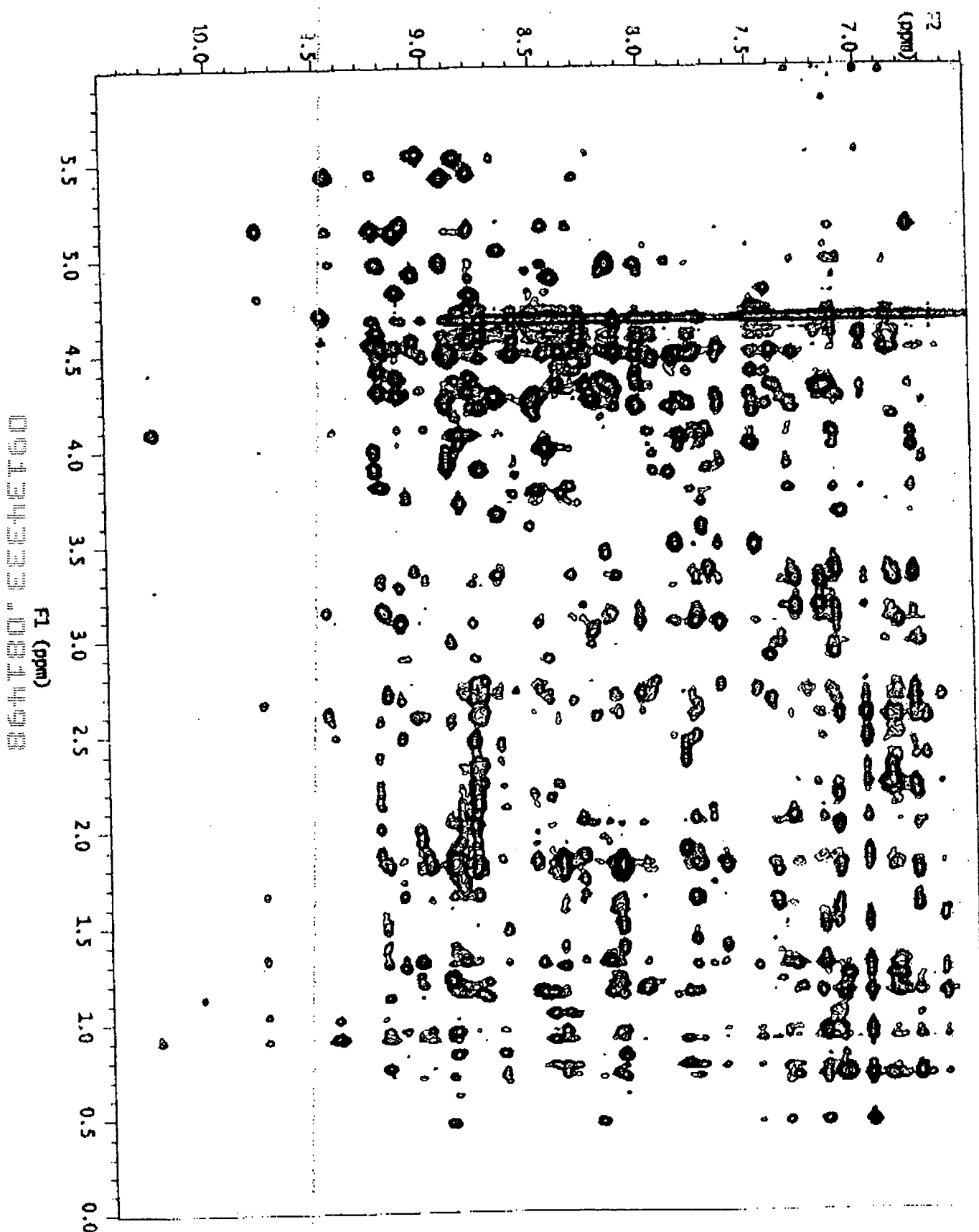


FIGURE 12.1b (NOESY VIVAX)

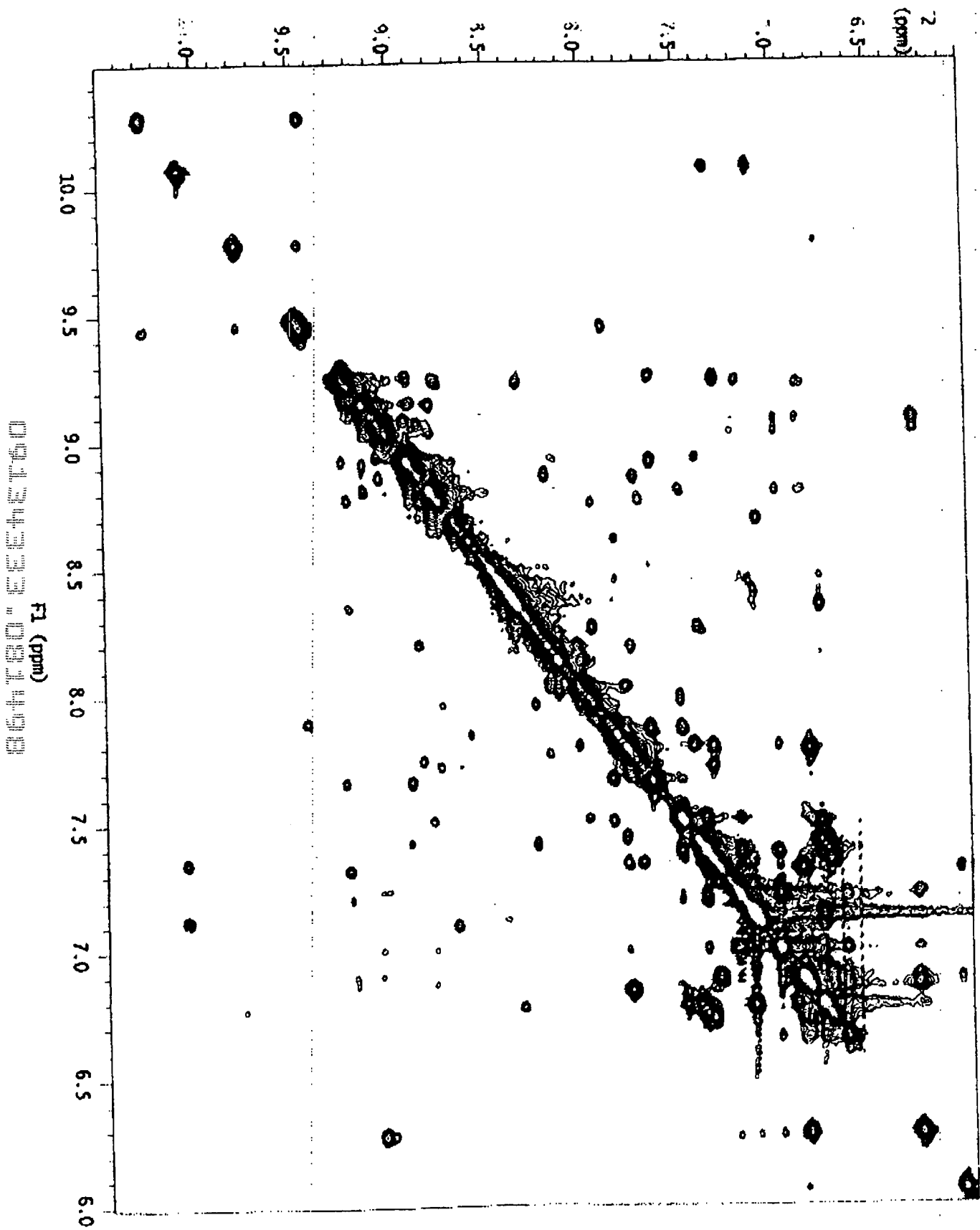


FIGURE 12.1c (TOCSY VIVAX)

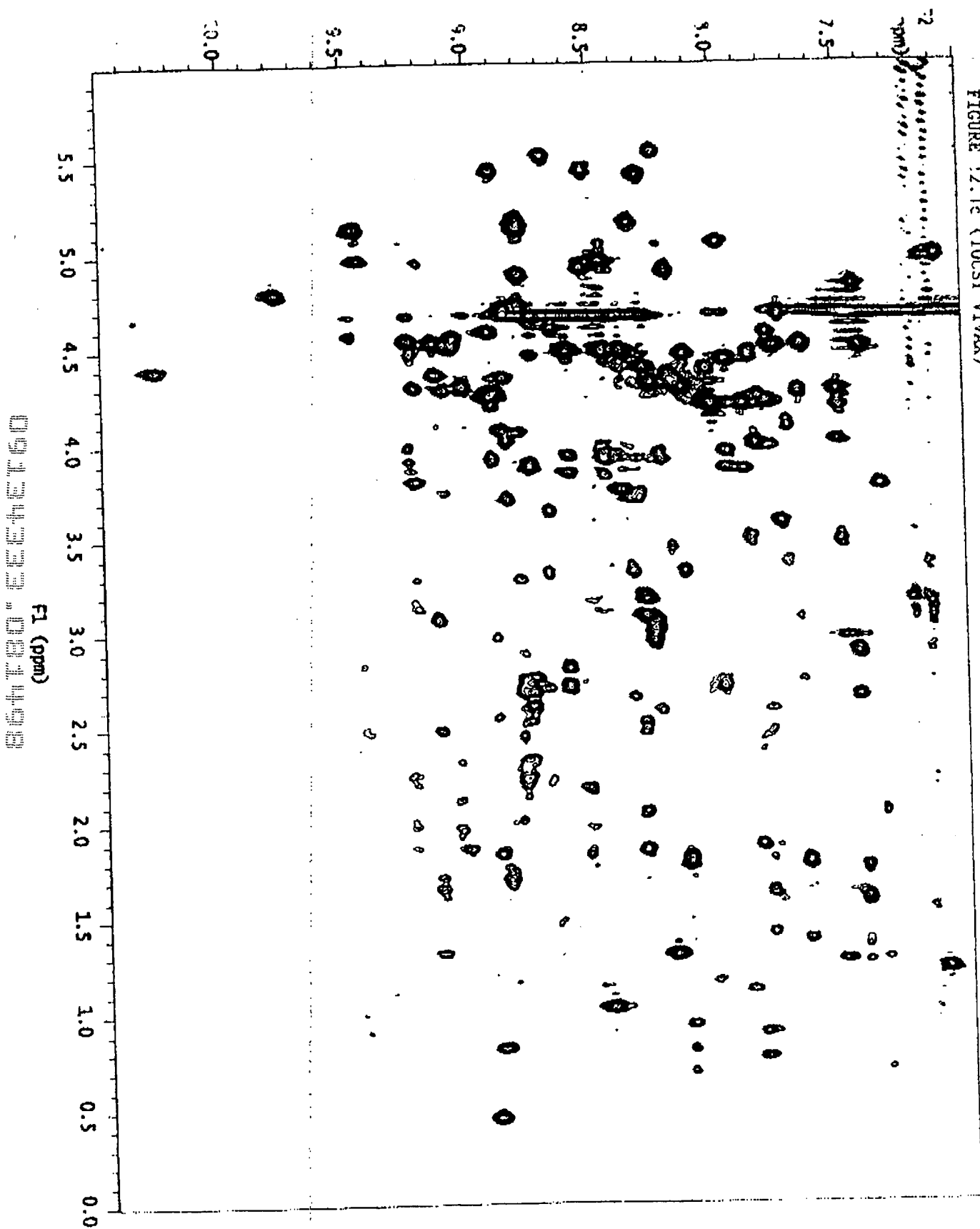


FIGURE 12.2a (NOESY FALCIPARUM)

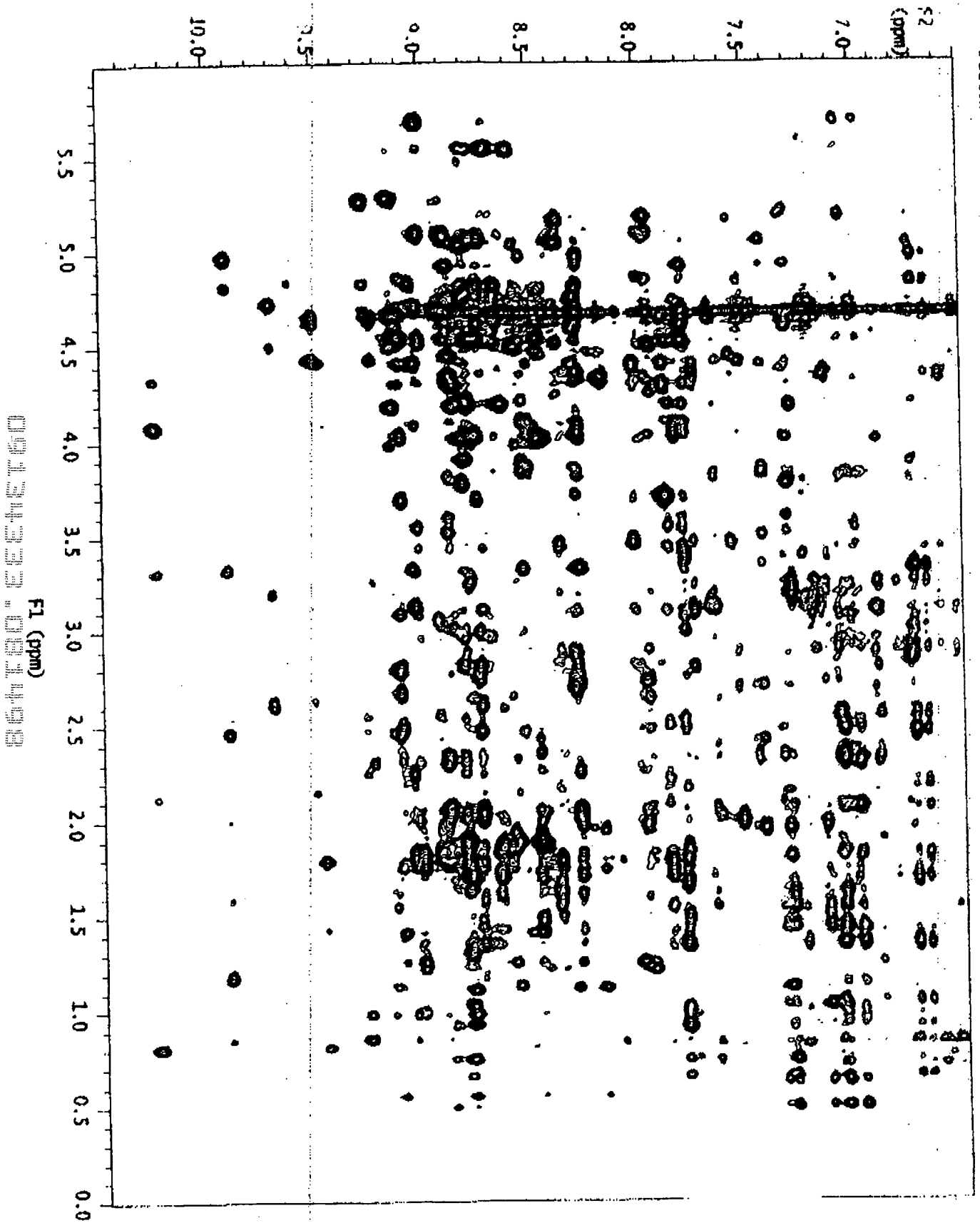
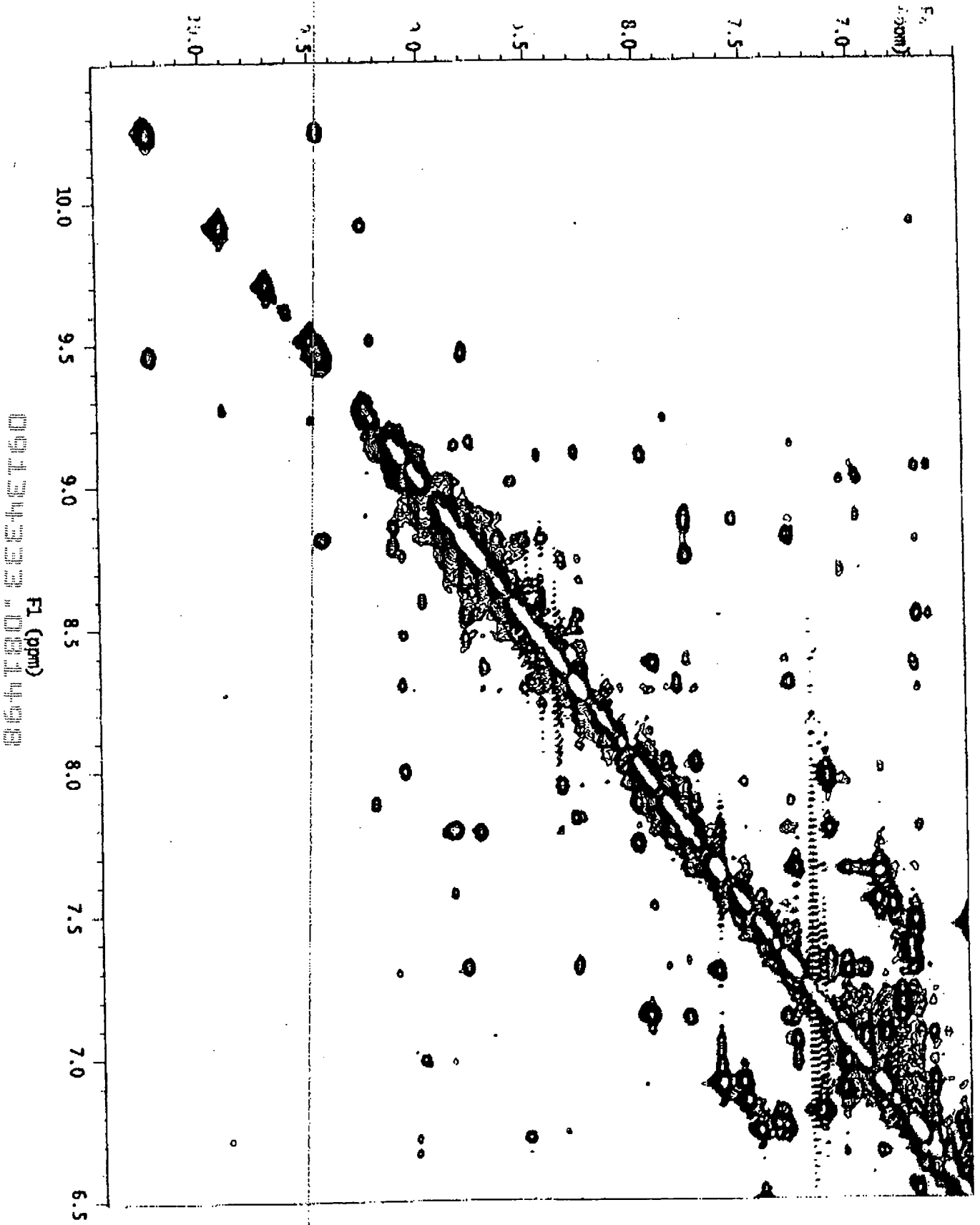
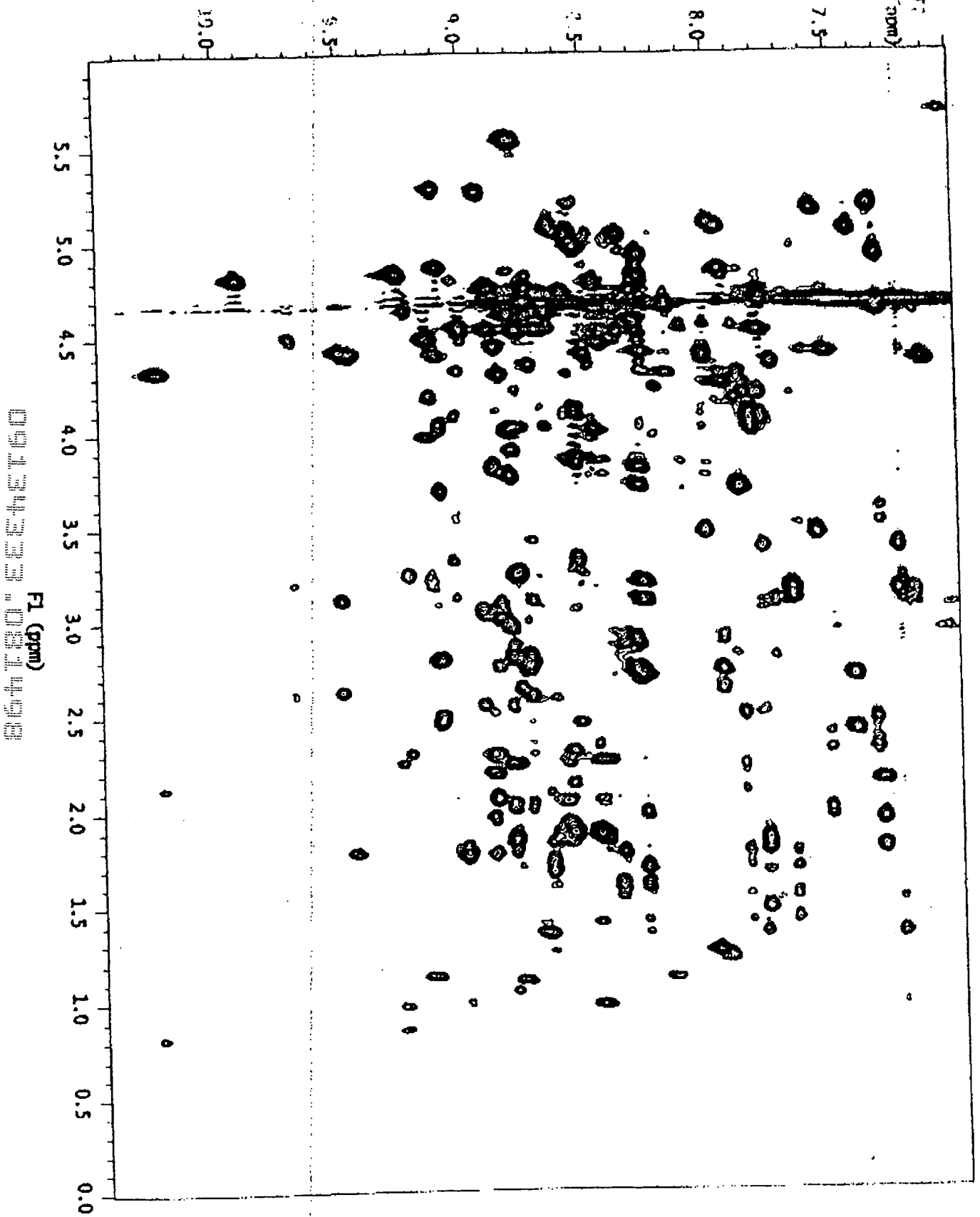


FIGURE 12.2b (NOESY FALCIPARUM)

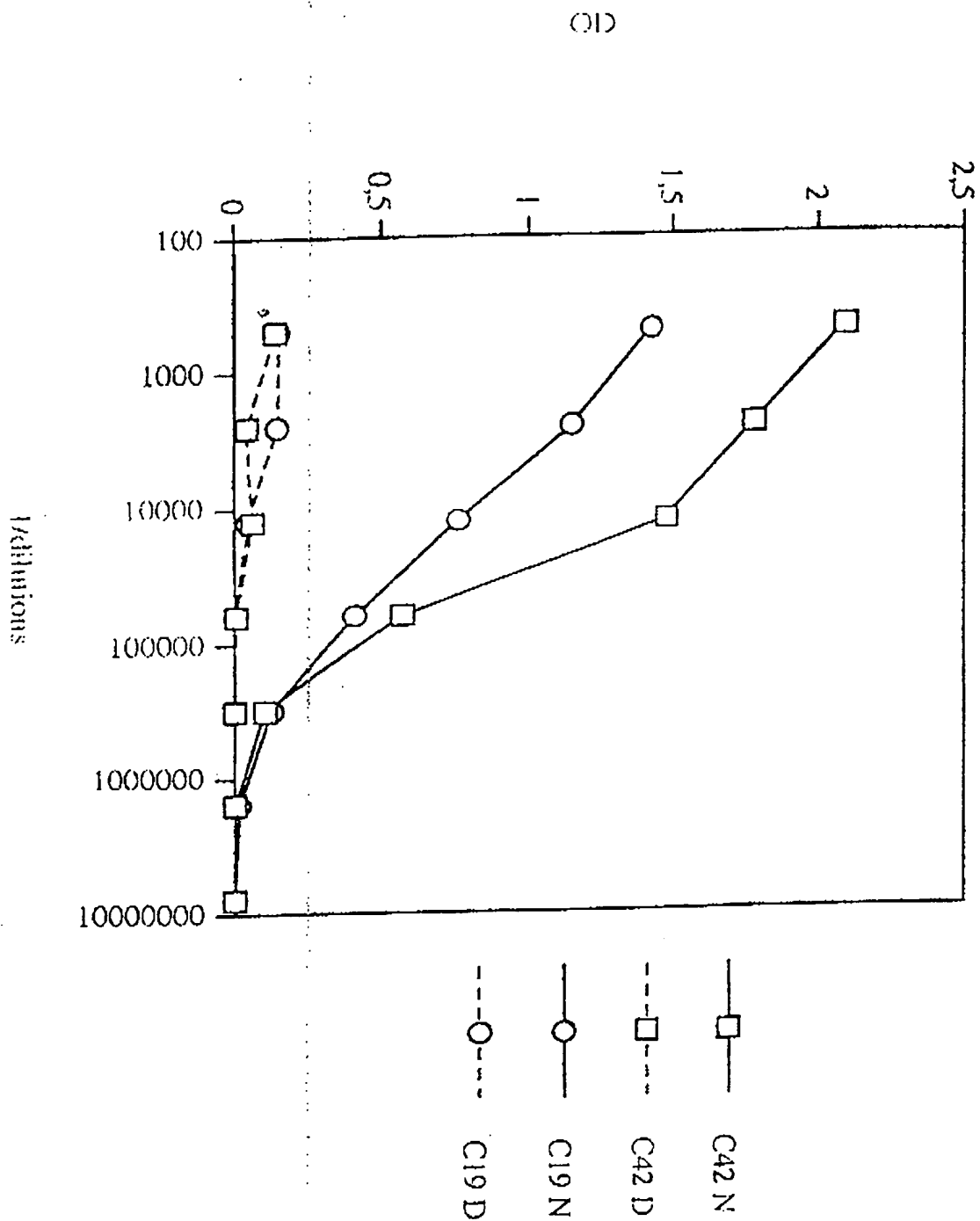


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FIGURE 12.2c (TCCSY FALCIPARUM)

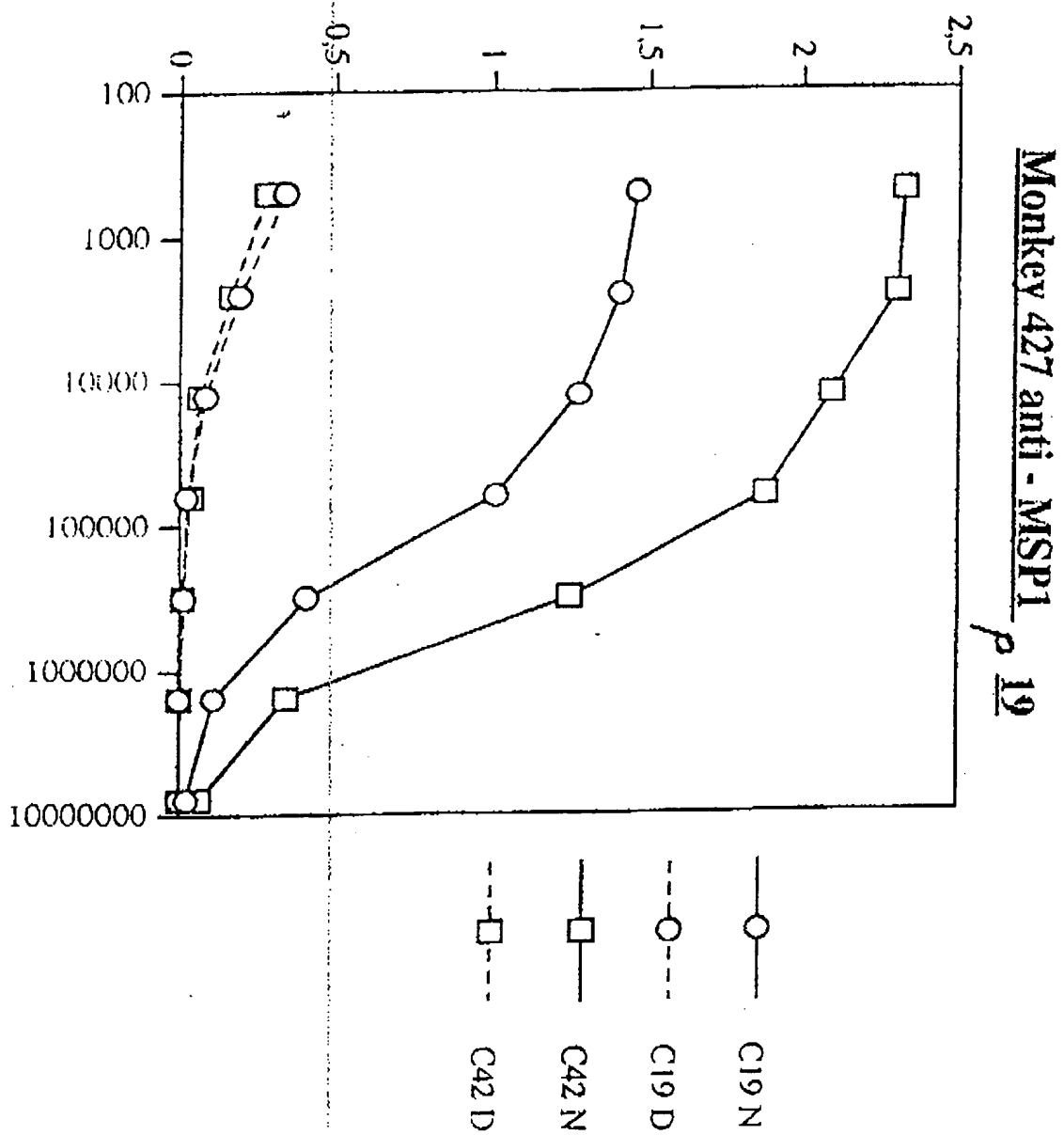


Monkey 426 anti-MSP1_{p19}



09134333 - 001498

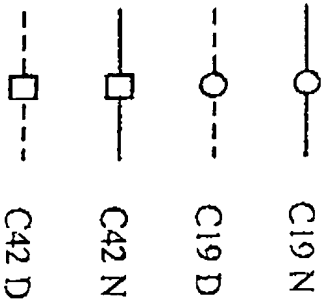
FIGURE 13A



Dilutions 100 1000 10000 100000 1000000 10000000

FIGURE 13B

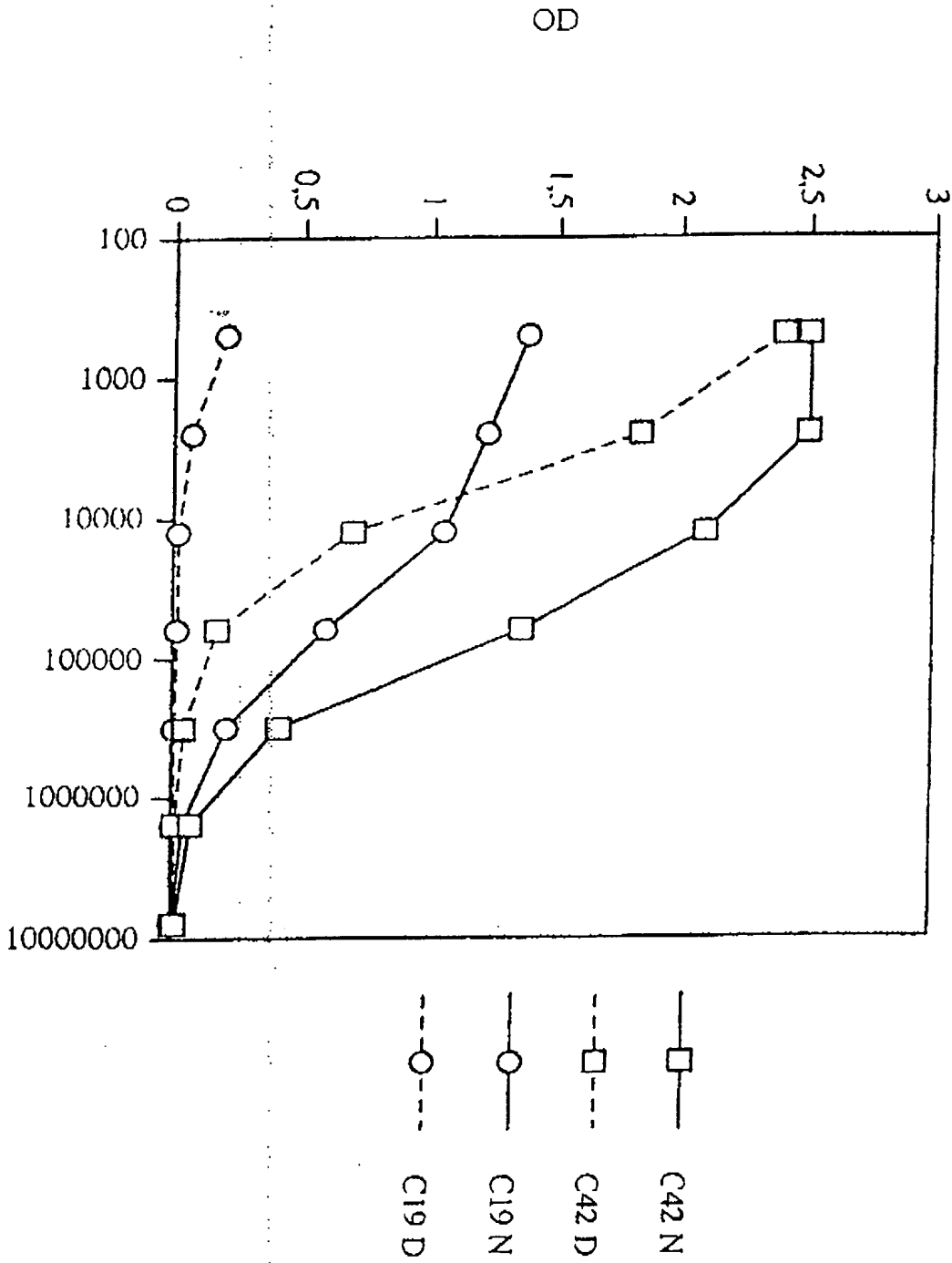
19



2000-2001		2001-2002		2002-2003		2003-2004		2004-2005		2005-2006		2006-2007		2007-2008		2008-2009		2009-2010		2010-2011		2011-2012		2012-2013		2013-2014		2014-2015		2015-2016		2016-2017		2017-2018		2018-2019		2019-2020		2020-2021		2021-2022		2022-2023		2023-2024		2024-2025		2025-2026		2026-2027		2027-2028		2028-2029		2029-2030		2030-2031		2031-2032		2032-2033		2033-2034		2034-2035		2035-2036		2036-2037		2037-2038		2038-2039		2039-2040		2040-2041		2041-2042		2042-2043		2043-2044		2044-2045		2045-2046		2046-2047		2047-2048		2048-2049		2049-2050		2050-2051		2051-2052		2052-2053		2053-2054		2054-2055		2055-2056		2056-2057		2057-2058		2058-2059		2059-2060		2060-2061		2061-2062		2062-2063		2063-2064		2064-2065		2065-2066		2066-2067		2067-2068		2068-2069		2069-2070		2070-2071		2071-2072		2072-2073		2073-2074		2074-2075		2075-2076		2076-2077		2077-2078		2078-2079		2079-2080		2080-2081		2081-2082		2082-2083		2083-2084		2084-2085		2085-2086		2086-2087		2087-2088		2088-2089		2089-2090		2090-2091		2091-2092		2092-2093		2093-2094		2094-2095		2095-2096		2096-2097		2097-2098		2098-2099		2099-2100		2100-2101		2101-2102		2102-2103		2103-2104		2104-2105		2105-2106		2106-2107		2107-2108		2108-2109		2109-2110		2110-2111		2111-2112		2112-2113		2113-2114		2114-2115		2115-2116		2116-2117		2117-2118		2118-2119		2119-2120		2120-2121		2121-2122		2122-2123		2123-2124		2124-2125		2125-2126		2126-2127		2127-2128		2128-2129		2129-2130		2130-2131		2131-2132		2132-2133		2133-2134		2134-2135		2135-2136		2136-2137		2137-2138		2138-2139		2139-2140		2140-2141		2141-2142		2142-2143		2143-2144		2144-2145		2145-2146		2146-2147		2147-2148		2148-2149		2149-2150		2150-2151		2151-2152		2152-2153		2153-2154		2154-2155		2155-2156		2156-2157		2157-2158		2158-2159		2159-2160		2160-2161		2161-2162		2162-2163		2163-2164		2164-2165		2165-2166		2166-2167		2167-2168		2168-2169		2169-2170		2170-2171		2171-2172		2172-2173		2173-2174		2174-2175		2175-2176		2176-2177		2177-2178		2178-2179		2179-2180		2180-2181		2181-2182		2182-2183		2183-2184		2184-2185		2185-2186		2186-2187		2187-2188		2188-2189		2189-2190		2190-2191		2191-2192		2192-2193		2193-2194		2194-2195		2195-2196		2196-2197		2197-2198		2198-2199		2199-2200		2200-2201		2201-2202		2202-2203		2203-2204		2204-2205		2205-2206		2206-2207		2207-2208		2208-2209		2209-2210		2210-2211		2211-2212		2212-2213		2213-2214		2214-2215		2215-2216		2216-2217		2217-2218		2218-2219		2219-2220		2220-2221		2221-2222		2222-2223		2223-2224		2224-2225		2225-2226		2226-2227	
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FIGURE 13C

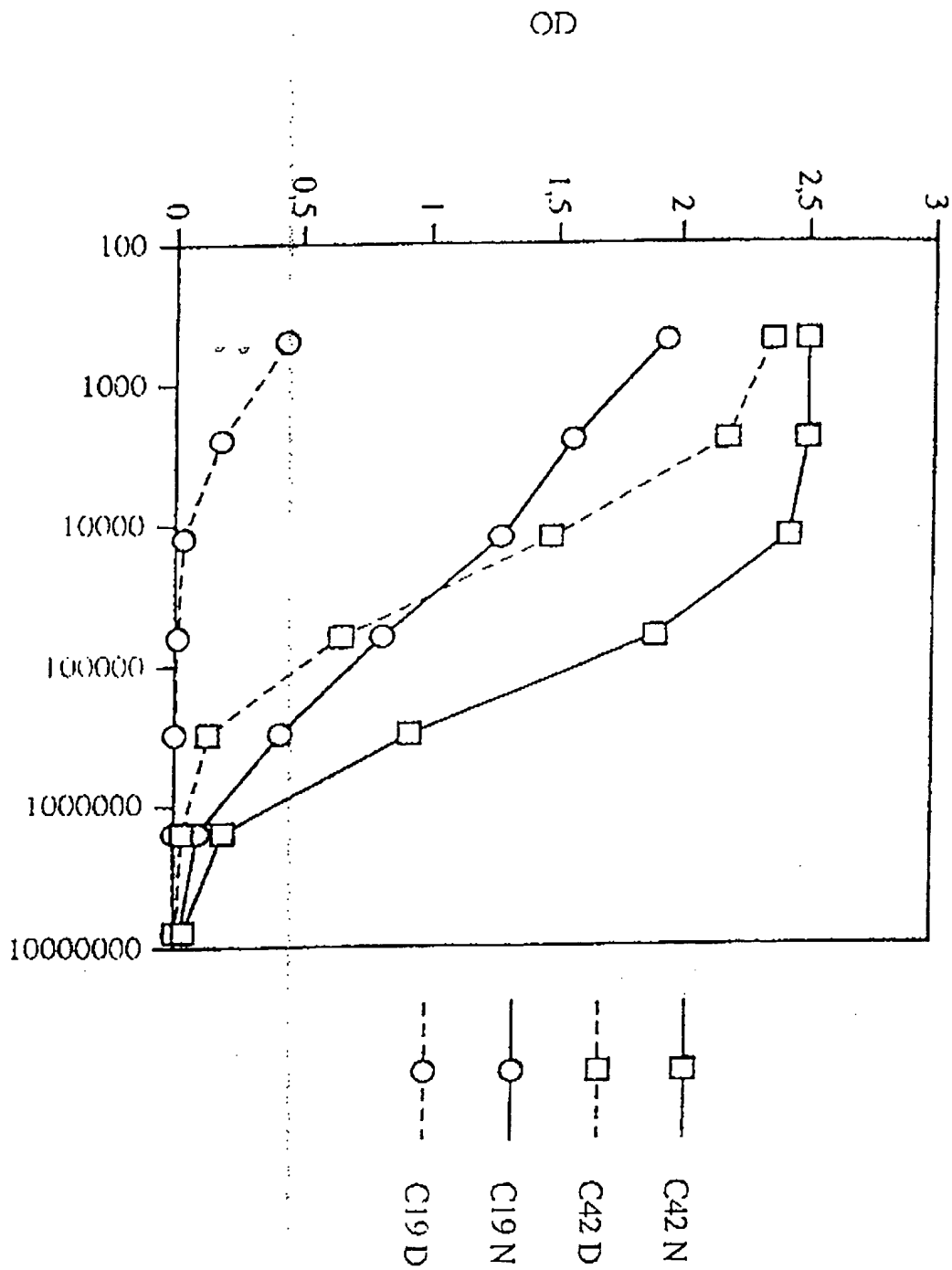
Monkey 428 anti - MSP1_{p42}



09134333 091498

FIGURE 13D

Monkey 434 anti - MSP1 p 42



09134233, 001490

FIGURE 13E

Monkey 435 anti - MSP1 p 42

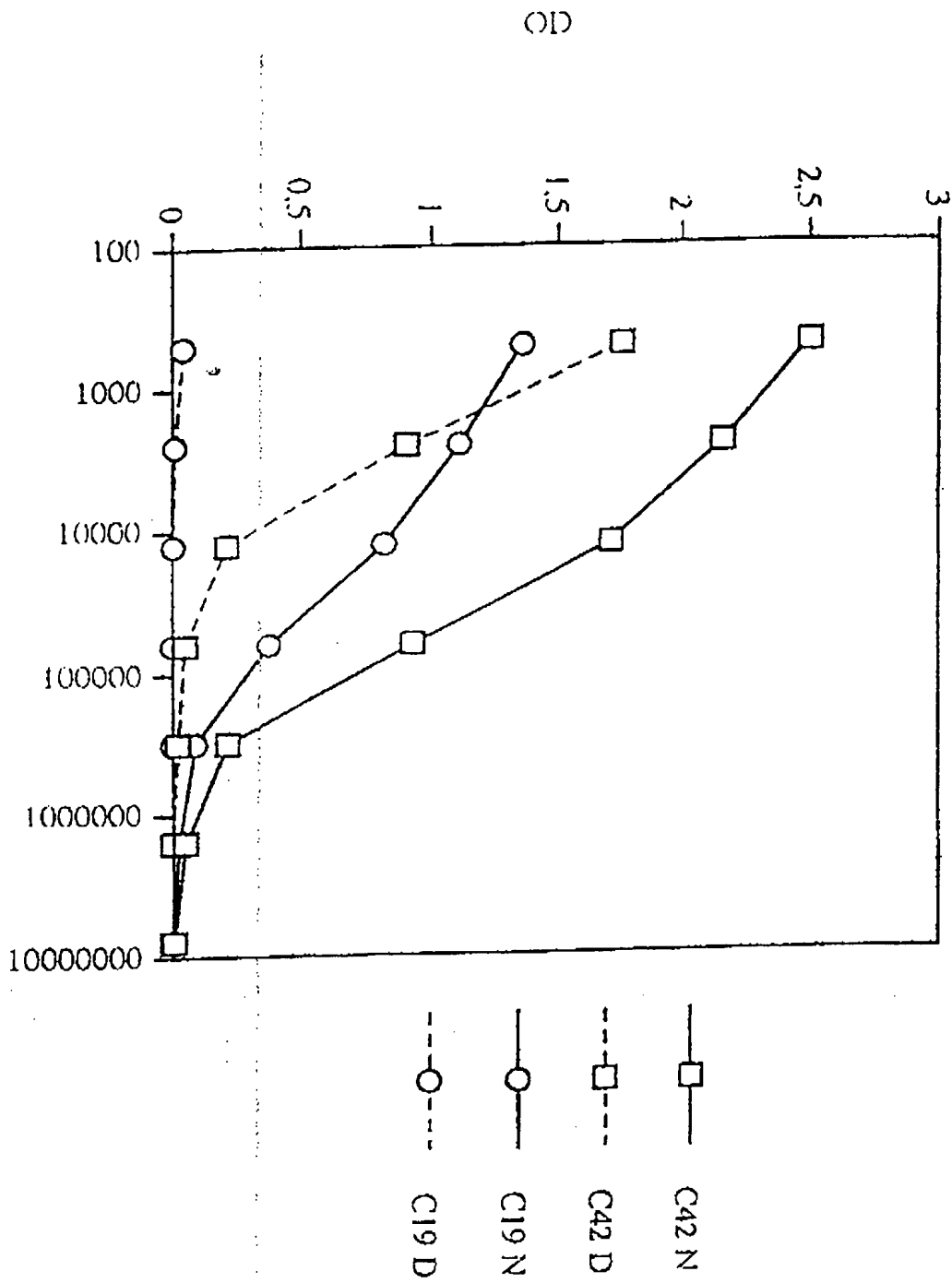
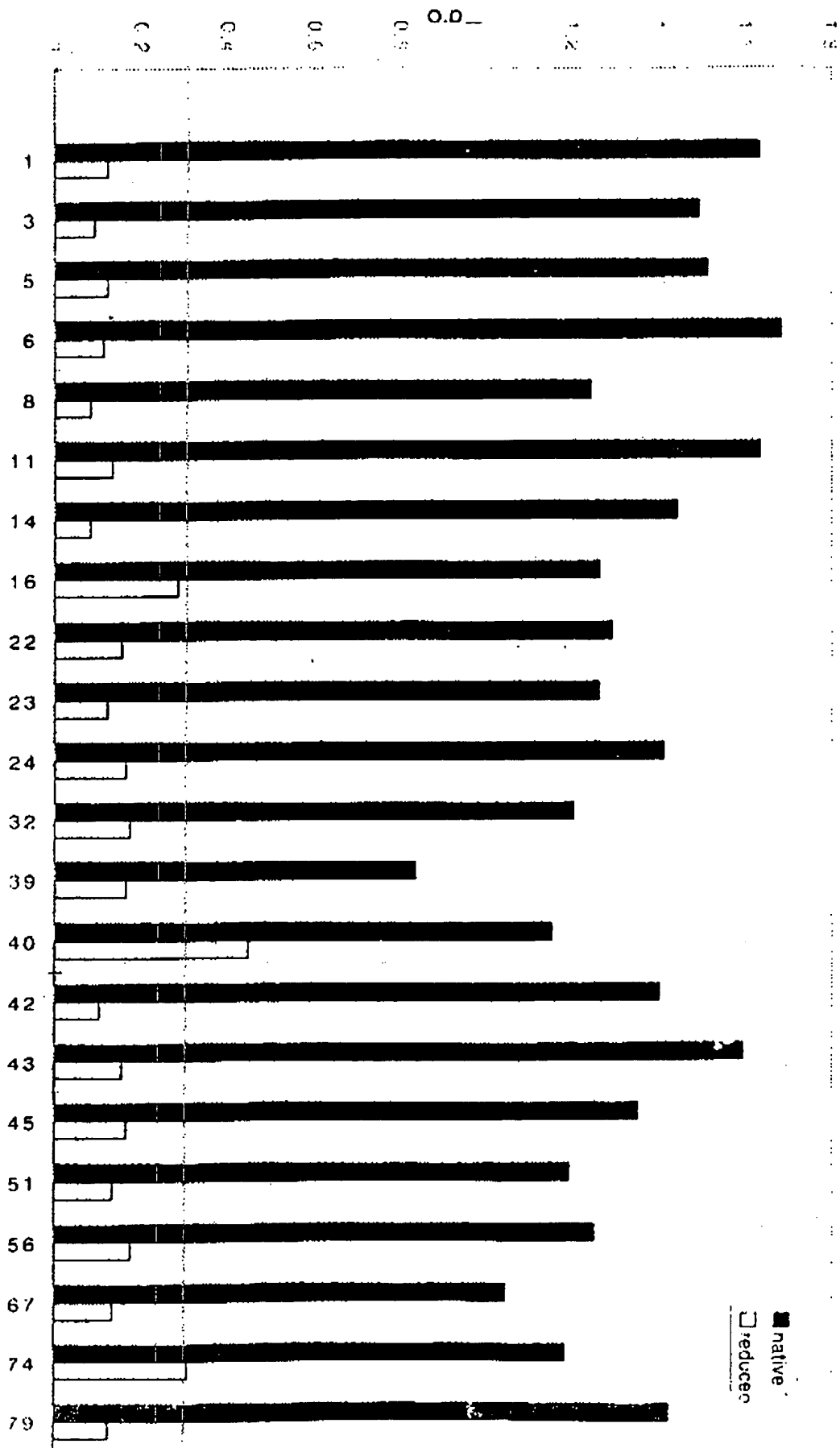


FIGURE 13F

Endemic human antisera reactivity with recombinant *Plasmodium vivax* MSP1₁₉
(immunoaffinity purified)

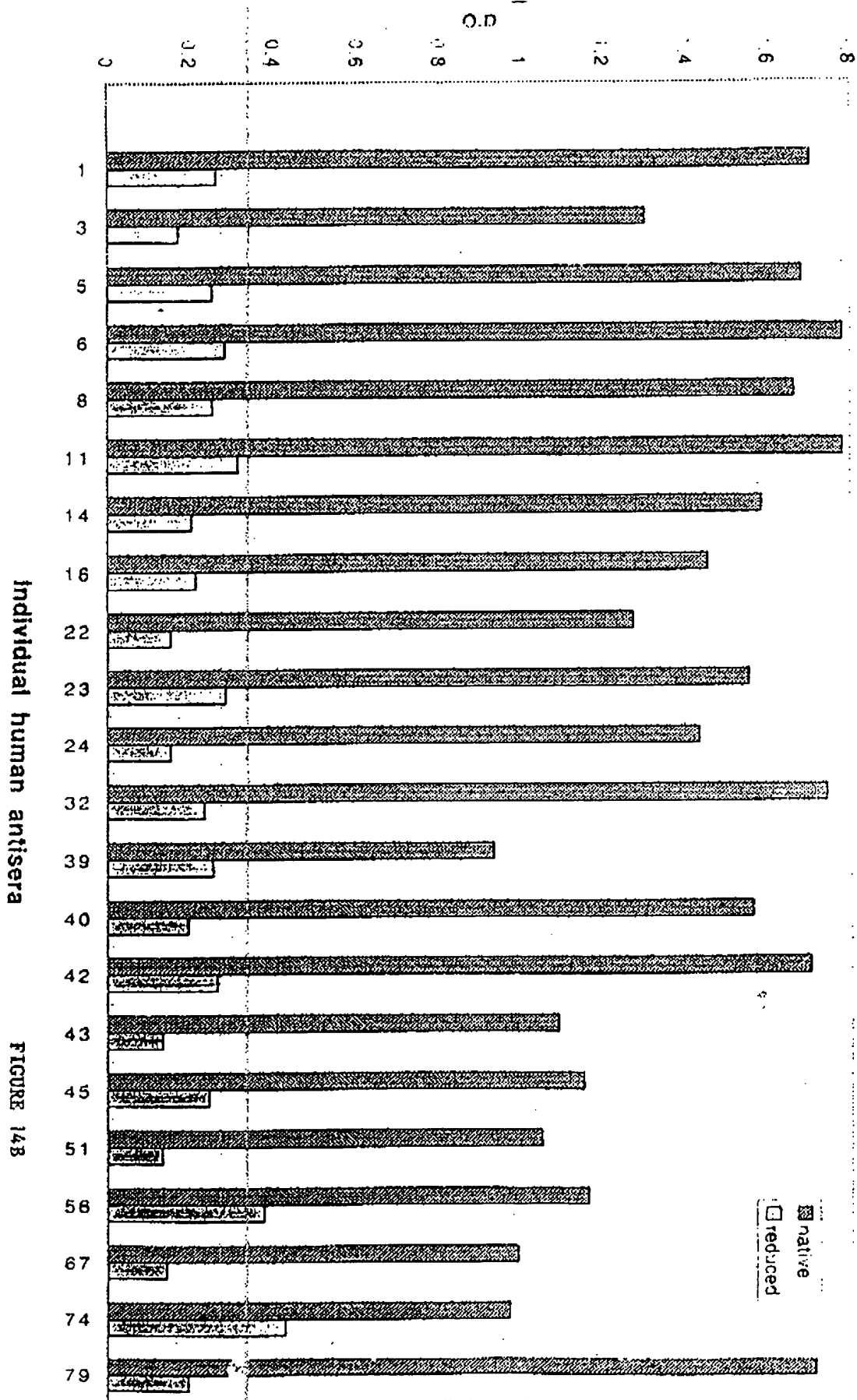


Individual human antisera

FIGURE 14A

09134333 081498

Endemic human antisera reactivity with recombinant *Plasmodium vivax* MSP1₁₉
(metalloaffinity purified)



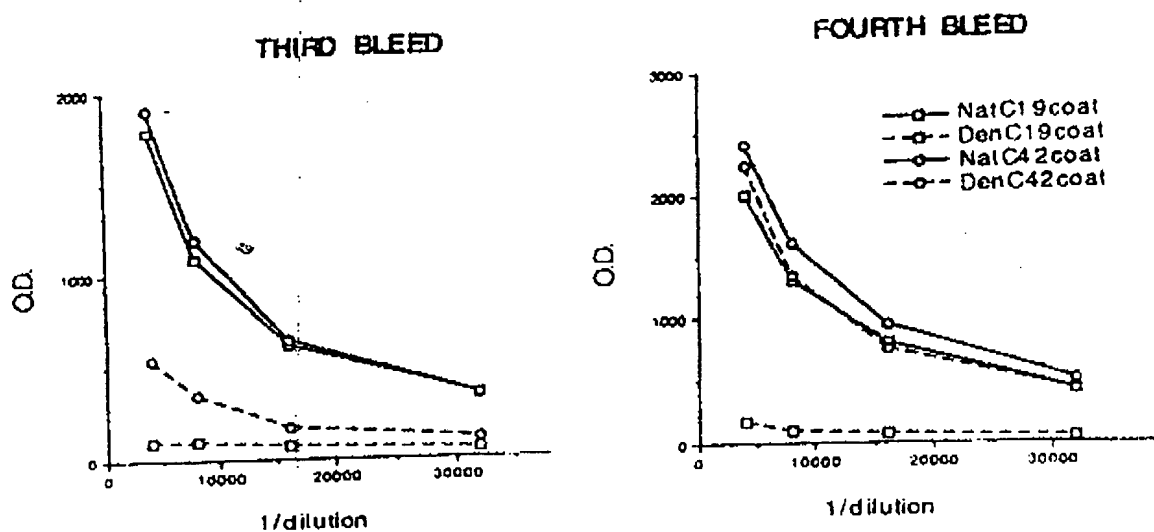
Individual human antisera

FIGURE 14B

09134333.081498

FIGURE 15

ANTI-C42 RESPONSE



ANTI-C19 RESPONSE

